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MORNSUN®

One-stop solutions of power supplies

AC/DC Enclosed Switching Power Supply • AC/DC Converter • DC/DC Converter • Transceiver Module
Signal Conditioning Module • IGBT Driver • LED Driver • EMC Auxiliary Device

Product Catalogue 2021

MORNSUN®

MORE THAN RELIABILITY

About MORNSUN

MORNSUN is a one–stop power supplies solutions manufacturer. With 23 years of experience in the area of power supply design and manufacture, MORNSUN has released onto the global market 5000+ high–quality products including AC/DC converter, DC/DC converter, enclosed switching power supply, power ICs, and transformers, etc. for different applications and industries, such as industrial auto–mation, charging station, photovoltaic, telecommunications, medical, smart home, automotive industry, and more. Guided by the service principle of "trustworthiness", MORNSUN offers the best products, fast and local service, and efficient pre–sales and after–sales support for the clients worldwide.

R&D Center in Guangzhou

Manufacturing Center in Huaihua

- Established: 1998
- Factory: 60, 000+ square meters
- Employees: 2600+ R&D engineers: 500+
- Patents & IPRs: 1000+
- Subsidiaries: North America/Germany/India

Headquarters in Guangzhou

One–stop solutions of power supplies

Professional Technology & Automated Manufacturing

- 1000+ patents and IPRs: power circuit topology, transformer structures, assembling technology, etc.
- Drafted 4 standards: NB/T 42093-2014, NB/T 10285-2019, <Photovoltaic Switching Power Supply> and <All-rounder DIY AC-DC Switching Power Supply>;
- With 60000+ square meters manufacturing center, 20+ SMT production lines, the production capacity is up to 80kk per year;
- International standard pin-out and SMD package with convenient design and automatic manufacturing process.

One-stop Product Sourcing

- The extensive product line, most of which are CE/UL/CB/CSA approval, aims to provide more suitable products for different demands:

  On-board power supplies: *AC/DC converter, DC/DC converter, EMC Auxiliary device, transceiver module, isolation amplifier, IGBT driver, power ICs, and transformers, etc.*

  Off-board power supplies: *enclosed switching power supply, DIN-Rail power supply and adaptor, etc.*
- 10000+ power supply design and industry application cases.

360° Professional Support

- Professional selection guide : 'Choose the product that works';
- Precise trading: Nearly 100% OTD and door-to-door delivery which reduce customers' cost and risks;
- 360° professional support: Fast response within 48hrs, routine visit, technical communication and discussion.

Notes:

NB/T 42093-2014: Wide voltage input and regulated output isolated DC-DC model power supply

NB/T 10285-2019: Fixed voltage input and unregulated output isolated DC-DC model power supply

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Milestones

2020----Awarded "Top 500 Manufacturing enterprise in Guangdong Province" for 5 years in a row (2016-2020)

2020----Awarded "Top 10 Power Supply Product" for 9 years in a row (2012-2020)

2020----Awarded "Automation Product Innovation"

2020----Awarded "China IC Achievement Award for Power Management IC"

2019----Awarded Guangdong Province Power Supply Association "Innovative Technology Contribution Achievement"

2019----Awarded "China Innovative Top 500 IPR"

2018----Awarded "Best Employer of China" for 5 years in a row (2013-2018)

2017----Awarded "TOP 500 Manufacturing enterprise in Guangdong Province" for 2 years in a row(2016-2017)

2017----Awarded Sci-Tech Awards by CHINA POWER SUPPLY SOCIETY for 3 times in a row (2013 -2017, biennial event)

2017----Awarded "TOP 10 Power Supply Product" for 6 years in a row (2012-2017)

2017----Awarded "Guangdong Outstanding Export Enterprise 2017"

2017----Awarded "Intellectual Property Mayor award in Guangzhou"

2017----Established MORNSUN Power GmbH in Germany

2017----Awarded "IPR Demonstration Enterprises in Guangdong 2017"

2017----Acquired "Guangdong Provincial Enterprise Technology Center"approval

2017----Member of the Product Safety Standards Working Group (under Ministry of Industry and Information Technology) and of drafting compulsory GB4943.1 standard and amending IEC62368-1 draft

Milestones

2017----High frequency switching DC power source awarded "Well-Known Product" in Guangdong（2014, 2017）

2016----Completed the certification of GB/T29490-2013 Enterprise IPR Management

2016----Awarded "Top 100 Innovative Enterprise in Guangdong"

2016----Awarded "To 20 Enterprise of Patent Creating in Development Zone" for 5 years in a row（2012-2016）

2016----Awarded "Guangdong Golden Award of Patent"

2015----Awarded "Guangdong Engineering Technology Research Center of Industrial Power Supply Module"

2015----Awarded "Well-Known Trademark" in Guangdong

2014----Purchased MORNSUN Guangzhou R&D center building

2013----Drafted Fixed voltage input and Unregulated output isolated DC-DC model power supply, standard number (pending): Energy 20130817

2012----Drafted Wide voltage input and regulated output isolated DC-DC model power supply, standard number NB/T 42039-2014, which goes into effect from Nov. 1 2014

2012----Ranked the top 18th of 100 most potential private companies by Forbes China

2012----Awarded "Most Satisfactory Employer of China 2012" under the Hi-Tech category

2011----Established MORNSUN Huaihua manufacturing center

2010----Moved to MORNSUN new headquarters building in Guangzhou Science City

2008----Established Subsidiary in the USA

2003----Awarded "High-tech Enterprise"

2001----Implemented informational management system

1998.07----Established MORNSUN in Guangzhou, China

Automatic SMT clean room

Automatic workshop

Markings

REACH

RoHS COMPLIANT

Systems

IATF16949 ISO9001 ISO14001 OHSAS18001

Key to the Reliability

Power supply is the heart of industrial equipment. What customers concern most is not the price, the function or the efficiency, but the reliability of the power supply. In other words, it must not break down especially in various extreme situations.

It is easy to guarantee the function of the power supply, but not the reliability, particularly the reliability of the power supply under harsh conditions. The reliability can only be achieved by a perfect management system which consists of advanced research technology, high-quality raw material platform, advanced equipment, excellent manufacturing process management, specialized screening sequence on reliability and rich experience.

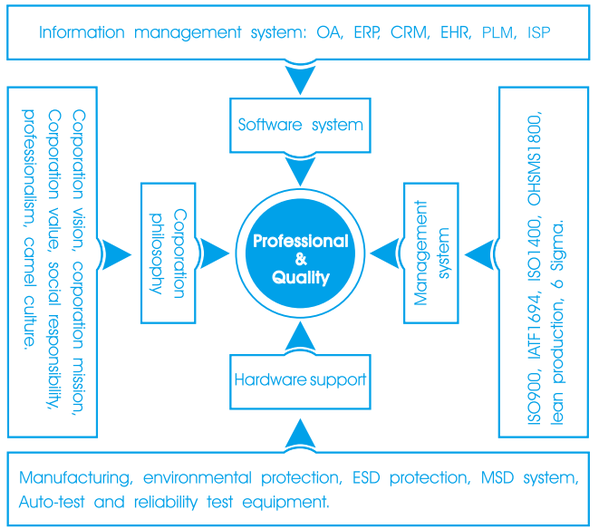
Meanwhile, the reliability of products depends on not only design and manufacturing but also customers' proper operation. Therefore, MORNSUN FAE team are ready to offer professional technical support to customers to enhance the reliability.

Therefore, improving the reliability of the products is not a simple task but a rather complex system.

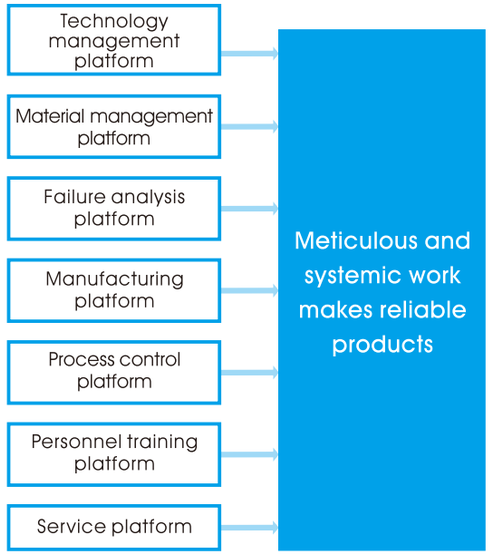
To meet customers demand and expectation, MORNSUN spends much time and money to improve the power supply reliability. In 2007, MORNSUN established the power supply reliability system and brought in 7 platforms to improve the reliability of MORNSUN products, including Technology management platform,Material management platform,Failure analysis platform,Manufacturing platform,Process control platform,Personnel training platform,Service platform. Thanks to these platforms, MORNSUN makes significant breakthroughs in all existing products and develops R3 DC-DC Converter with higher reliability and upgraded performance.

"No pain, no gain." The reliability can only be achieved by earnest, meticulous work, step by step, which is consistent with MORNSUN's Camel Culture. In conclusion, MORNSUN's meticulous and systemic work makes products reliable.

MORNSUN's TQA System Architecture



Reliability Assurance



AD/DC Enclosed Switching Power Supply

LM AD/DC Enclosed Switching Power Supply (Single Output)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LM15-23Bxx	3Ø5RAC	15W	85-305VAC/120-430VDC	3.3,5,12,15,24,48	RoHS cULus CE CCC	25
LM25-23Bxx	3Ø5RAC	25W	85-305VAC/120-430VDC	3.3,5,12,15,24,48	RoHS cULus CE CCC	25
LM35-23Bxx	3Ø5RAC	35W	85-305VAC/120-430VDC	5,12,15,24	RoHS cULus CE CCC	25
LM50-23Bxx	3Ø5RAC	50W	85-305VAC/120-430VDC	5,12,15,24,36,48	RoHS cULus CE CCC	25
LM75-23Bxx	3Ø5RAC	75W	85-305VAC/120-430VDC	5,12,15,24,36,48	RoHS cULus CE CCC	25
LM100-23Bxx	3Ø5RAC	100W	85-305VAC/120-430VDC	5,12,15,24,36,48	RoHS cULus CE CCC	25
LM150-23Bxx	3Ø5RAC	150W	85-305VAC/120-430VDC	12,15,24,36,48	RoHS cULus CE CCC	25
LM200-10B		200W	90-132VAC/180-264VAC	5,12,15,24,36,48	RoHS cULus CE CQC	27
LM350-10B		350W	90-132VAC/180-264VAC	5,12,15,24,36,48	RoHS cULus CE CQC	27
LM450-12B		450W	176-264VAC/240-373VDC	12,15,24,27,36,48	RoHS CE	27
LM600-12B		600W	176-264VAC/240-373VDC	12,15,24,27,36,48	RoHS CE	27

LMF AD/DC Enclosed Switching Power Supply (With PFC Function, Single Output)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LMF75-20Bxx		75W	85-264VAC/120-370VDC	5,12,15,24,48	RoHS cULus CE CCC	29
LMF100-23Bxx	3Ø5RAC	100W	85-305VAC/120-430VDC	12,15,24,48,55	RoHS cULus CE CCC	29
LMF150-23Bxx	3Ø5RAC	150W	85-305VAC/120-430VDC	12,15,24,48	RoHS cULus CE CCC	29
LMF200-23Bxx	3Ø5RAC	200W	85-305VAC/120-430VDC	5,12,15,24,48	RoHS cULus CE CCC	29
LMF320-23Bxx	3Ø5RAC	320W	85-305VAC/120-430VDC	5,12,15,24,48	RoHS cULus CE CCC	29
LMF600-20Bxx		600W	85-264VAC/120-373VDC	12,24,36,48	RoHS CE (Pending)	29
LMF1000-20Bxx		1000W	90-264VAC/120-390VDC	12,24,48	RoHS CE (Pending)	29

LM AD/DC Enclosed Switching Power Supply (Multiple Outputs)

Series	Power	Input Voltage Range	No. of Outputs	Output Voltage(VDC)	Markings	Page
LM35-10C	35W	85-264VAC/120-373VDC	3	+5/±12,+5/±15,+5/+24/+12	RoHS CE	31
LM35-10D	35W	85-264VAC/120-373VDC	2	+5/+12,+5/+24	RoHS cULus CE	31
LM50-10A	50W	85-264VAC/120-373VDC	2	±12	RoHS CE	31
LM50-10C	50W	85-264VAC/120-373VDC	3	+5/±12,+5/±15,+5/+24/+12	RoHS CE	31
LM50-10D	50W	85-264VAC/120-373VDC	2	+5/+12,+5/+24	RoHS CE	31
LM75-10C	75W	90-264VAC/120-373VDC	3	+5/±12,+5/±15,+5/+24/+12	RoHS CE	31
LM75-10D	75W	90-264VAC/120-373VDC	2	+5/+12,+5/+24	RoHS cULus CE	31
LM100-10C	100W	90-264VAC/120-373VDC	3	+5/±12,+5/±15,+5/+24/+12	RoHS CE	31
LM100-10D	100W	90-264VAC/120-373VDC	2	+5/+24,+12/+24	RoHS CE	31

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AD/DC Enclosed Switching Power Supply

LOF High Power Density Open Frame / Enclosed Switching Power Supply (With PFC Function)

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LOF120-20Bxx(-C)	120W	85-264VAC/120-373VDC	12,15,24,27,36,48,54	RoHS cULus CE	33
LOF225-20Bxx(-C)	Air cooling: 120W 13CFM: 225W	85-264VAC/120-373VDC	12,15,24,27,36,48,54	RoHS cULus CE	33
LOF350-20Bxx(-C)	Air cooling:180-200W 20.5CFM: 300-351W	90-264VAC/127-373VDC	12,15,24,27,36,48,54	RoHS cULus CE	33
LOF450-20Bxx(-C/-CF)	Air cooling:250W 25CFM: 450W	90-264VAC/127-373VDC	12,15,24,27,36,48	RoHS cULus CE (Pending)	35
LOF550-20Bxx(-C/-CF)	Air cooling:320W 25CFM: 550W	90-264VAC/127-373VDC	12,15,24,27,36,48	RoHS cULus CE (Pending)	35

• The products are stringently comply with medical standards, meets "2*MOPP" safety level, suitable for the applications of patient contact and patient auxiliary.

KNX AD/DC Bus Power Supply

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
KNX20-22A640	20W	180-264VAC/254-370VDC	30	RoHS CE	36

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AD/DC DIN-Rail Power Supply

LI Plastic DIN-Rail Power Supply LI-PR2 Series

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LI30-20BxxPR2	30W	85-264VAC/120-370VDC	5,12,15,24,48	RoHS	37
LI60-20BxxPR2	60W	85-264VAC/120-370VDC	5,12,15,24,48	RoHS	37
LI100-20BxxPR2	100W	85-264VAC/120-370VDC	12,15,24,48	RoHS	37

LI Single-phase Metal DIN-Rail Power Supply (Without PFC Function) LI Series

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LI75-20BxxR2	75W	90-264VAC/120-373VDC	12,24,48	RoHS	38
LI120-20BxxR2S	120W	85-264VAC/120-370VDC	12,24,48	RoHS (Pending)	38

LIF Single-phase DIN-Rail Power Supply (With PFC Function) LIF Series

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LIF120-10BxxR2	120W	85-264VAC/100-370VDC	12,24,48	RoHS (Pending)	39
LIF120-10BxxR2S-EX	120W	85-264VAC/100-370VDC	12,24,48	RoHS ATEX IECEx (Pending)	39
LIF240-10BxxR2	240W	85-264VAC/100-370VDC	12,24,48	RoHS (Pending)	39
LIF480-10BxxR2	480W	85-264VAC/100-370VDC	24,48	RoHS (Pending)	39

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AD/DC Converter

LS DIY Type AD/DC Converter

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LS03-13BxxR3	3PSRAC	3W	85-305VAC/70-430VDC	3.3,5,9,12,15,24	RoHS	41
LS05-13BxxR3(-F)	3PSRAC	5W	85-305VAC/70-430VDC	3.3,5,9,12,15,24	RoHS	41
LS10-13BxxR3	3PSRAC	10W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	41
LS10-13BxxR3P	3PSRAC	10W	85-305VAC/90-430VDC	3.3,5,9,12,15,24	RoHS	41
LS15-13BxxSS(-F)	3PSRAC	15W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	41

LS Non-isolated DIY Type AD/DC Converter

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LS01-K3B05SS	3PSRAC	1W	85-305VAC/70-430VDC	5	RoHS	43
LS03-K3B12SS	3PSRAC	3W	85-305VAC/70-430VDC	12	RoHS	43
LS05-K3BxxSS	3PSRAC	5W	85-305VAC/70-430VDC	5,12,24	RoHS	43

LSF Single-wire DIY Type AD/DC Converter

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LSF01-K5BxxSS	1W	8(15)-380VDC	5.5, 12.5	RoHS	44

LD Compact Size Cost-effective AD/DC Converter

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LD03-23BxxR2	3PSRAC	3W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	45
LD05-23BxxR2	3PSRAC	5W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	45
LD10-23BxxR2	3PSRAC	10W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	45
LD15-23BxxR2	3PSRAC	15W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	45
LD20-23BxxR2	3PSRAC	20W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS	45
LD30-23BxxR2	3PSRAC	30W	85-305VAC/100-430VDC	3.3,5,9,12,15,24,48	RoHS	45
LDE45-20B		45W	85-264VAC/100-370VDC	5,12,15,24,48	RoHS	45
LDE60-20B		60W	85-264VAC/100-370VDC	5,12,15,24,48	RoHS	45

LD Ultra-wide Input Voltage Cost-effective AD/DC Converter

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LD03-16B	Electric power	3W	90-528VAC/100-745VDC	3.3,5,9,12,15,24	RoHS	47
LD10-26B	Electric power	10W	90-528VAC/100-745VDC	3.3,5,9,12,15,24	RoHS	47
LD20-26B	Electric power	20W	90-528VAC/100-745VDC	3.3,5,9,12,15,24	RoHS	47

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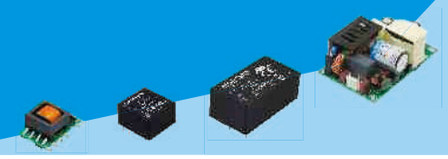

LHE Multiple Outputs AD/DC Converter

Series	Power	Input Voltage Range	No. of Outputs	Output Voltage(VDC)	Markings	Page
LHE05-20Axxxx	5W	85-264VAC/100-370VDC	2	±5,±12,±15	RoHS	51
LHE05-20Cxxxx-xx	5W	85-264VAC/100-370VDC	3	5/±5,5/±12,5/±15	RoHS	51
LHE05-20Dxxxx-xx	5W	85-264VAC/100-370VDC	2	5/5,5/12,5/15,5/24	RoHS	51
LHE10-20Axxxx	10W	85-264VAC/100-370VDC	2	±5,±12,±15	RoHS	51
LHE10-20Cxxxx-xx	10W	85-264VAC/100-370VDC	3	5/±12,5/±15	RoHS	51
LHE10-20Dxxxx-xx	10W	85-264VAC/100-370VDC	2	5/5,5/12,5/15,5/24	RoHS	51
LHE15-20Axxxx	15W	85-264VAC/100-370VDC	2	±5,±12,±15	RoHS	51
LHE15-20Cxxxx-xx	15W	85-264VAC/100-370VDC	3	5/±5,5/±12,5/±15	RoHS	51
LHE15-20Dxxxx-xx	15W	85-264VAC/100-370VDC	2	5/5,5/12,5/24	RoHS	51
LHE20-20Axxxx	20W	85-264VAC/100-370VDC	2	±12,±15	RoHS	51
LHE20-20Cxxxx-xx	20W	85-264VAC/100-370VDC	3	5/±12,5/±15	RoHS	52
LHE20-20Dxxxx-xx	20W	85-264VAC/100-370VDC	2	5/5,5/12,5/15,5/24	RoHS	52

LO Single Output Cost-effective AD/DC Converter

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LO03-10Bxx	3W	85-264VAC/100-370VDC	3.3,5,9,12,15,24	RoHS	49
LO05-12Bxx	5W	165-264VAC/230-370VDC	3.3,5,9,12,15,24	RoHS	49
LO10-13Bxx 305RAC	10W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS CE	49
LO15-10Bxx	15W	85-264VAC/100-370VDC	3.3,5,9,12,15,24	RoHS cULus CE	49
LO30-10Bxx	30W	85-264VAC/100-370VDC	3.3,5,9,12,15,24,48	RoHS cULus CE	49
LO45-10Bxx	45W	85-264VAC/100-370VDC	3.3,5,9,12,15,24,48	RoHS cULus CE	49
LO65-10Bxx	65W	85-264VAC/100-370VDC	5,9,12,15,24,48	RoHS cULus CE	49

LO Multiple Outputs Cost-effective AD/DC Converter

Series	Power	Input Voltage Range	No. of Outputs	Output Voltage(VDC)	Markings	Page
LO30-10Axx	30W	85-264VAC/100-370VDC	2	±12,±15	RoHS CE	48
LO30-10Dxxxx-xx	30W	85-264VAC/100-370VDC	2	5/5,5/12,5/24	RoHS CE	48
LO45-10Cxxxx-xx	45W	85-264VAC/100-370VDC	3	±5/12,5/±12,5/±15	RoHS CE	48

KM Contactor Control Module

Series	Apparent Power	Control Voltage Range	Rated Operating Current	No-load Switch Frequency	Markings	Page
KM95-C0-O	6.5VA	90-275 VAC/VDC	95A	3600 times / H	RoHS	61
KM115-C0-O	6.5VA	75-305 VAC/VDC	115A	3600 times / H	RoHS	61

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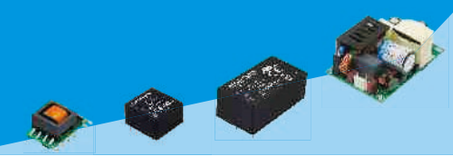
AD/DC Converter



Electric Power Open Frame AD/DC Converter Specialized for Electric Power

Series		Power	Input Voltage Range	No. of Outputs	Output Voltage(VDC)	Markings	Page
LO15-23BxxE	Electric power	15W	85-305VAC/88-430VDC	1	3.3,5,12,15,24	RoHS CE	53
LO30-23BxxE	Electric power	30W	85-305VAC/88-430VDC	1	3.3,5,12,15,24	RoHS CE	53
LO50-23BxxE	Electric power	50W	85-305VAC/88-430VDC	1	3.3,5,9,12,15,24,27,48	RoHS CE	53
LO75-20BxxE	Electric power	75W	85-264VAC/88-370VDC	1	3.3,5,9,12,15,24,27,48	RoHS CE	53
LO10-26Dxxxx-xxL	Electric power	10W	57-528VAC/80-745VDC	2	5.1/12	RoHS	53
LO15-26Dxxxx-xx	Electric power	15W	57-528VAC/80-745VDC	2	12/12,13.5/5	RoHS	53
LO20-26Dxxxx-xx	Electric power	20W	165-480VAC/230-680VDC	2	12.15/12	RoHS	55
LO20-10Cxxxx-xx	Electric power	20W	85-264VAC/100-370VDC	3	5/+12/-12	RoHS	55
LO30-10Cxxxx-xx	Electric power	30W	85-264VAC/100-370VDC	3	5/+12/-12	RoHS	55
LO10-24BxxK	Electric power	6W	30-280VAC/30-400VDC	1	5,12,13	RoHS	55

Medical AD/DC Converter Specialized for Medical

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LD05-20BxxMU	Medical	5W	85-264VAC/100-370VDC	5,12,15,24	RoHS cULus CE CB	57
LH15-20BxxMU	Medical	15W	85-264VAC/100-370VDC	5,12,15,18,24	RoHS cULus CE CB	57
LH25-20BxxMU	Medical	20W	85-264VAC/100-370VDC	5,12,15,18,24	RoHS cULus CE	57
LO45-20BxxMU	Medical	45W	85-264VAC/100-370VDC	3.3,5,9,12,15,24,36,48	RoHS cULus CE (Pending)	57
LO65-20BxxMU	Medical	65W	85-264VAC/100-370VDC	3.3,5,9,12,15,24,36,48	RoHS cULus CE (Pending)	57

Mining Industry Ultra-wide, Ultra-high Input Voltage AD/DC Converter for Mining Industry

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
PVA40-26B	Mining	40W	460-1500VAC	12,28,35	RoHS	59
PVA40-27B	Mining	40W	85-900VAC	18,24,30	RoHS	59
PVA70-27B	Mining	70W	85-900VAC	24,28,35	RoHS	59
PVA120-27B	Mining	120W	85-900VAC	28,35	RoHS	59
PVA120-27B-C	Mining	120W	85-900VAC	35	RoHS	59
PVA150-27B	Mining	150W	85-850VAC	24,28,35	RoHS	59

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Fixed Input Voltage — DFN Package, Isolated & Unregulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
B_MT-1WR4	1W	5	5	3000	RoHS	62
D_T-1WR4	1W	5	5/5	3000	RoHS	62
E_T-1WR4	1W	5	±5	3000	RoHS	62
FB_T-1WR4	1W	5	5	4200	RoHS	62

Fixed Input Voltage — SMD Package, Isolated & Unregulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
A_XT-1WR3	1W	5,12,15,24	±5,±9,±12,±15,±24	1500	RoHS	63
B_XT-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	63
E_XT-1WR3	1W	5,12,15,24	±5,±9,±12,±15,±24	3000	RoHS	63
F_XT-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	3000	RoHS	63
FB0505XT-1WR3	1W	5	5	4200	RoHS	63
B_XT-2WR3	2W	12,24	5,12,15,24	1500	RoHS	64
F_XT-2WR3	2W	12,24	5,12,15,24	3000	RoHS	64

Fixed Input Voltage — SIP Package, Isolated & Unregulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
A_S-1WR3	1W	5,9,12,15,24	±3.3,±5,±9,±12,±15,±24	1500	RoHS	65
B_S-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	65
B_LS-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	65
E_S-1WR3	1W	5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000	RoHS	65
F_S-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	3000	RoHS	66
G_S-1WR2 Medical	1W	5,12,15,24	±5,±9,±12,±15	6000	RoHS	67
H_S-1WR2 Medical	1W	5,12,15,24	5,12,15	6000	RoHS	67
A_S-2WR3	2W	12,24	±3.3,±5,±12,±15	1500	RoHS	68
B_S-2WR3	2W	12,24	5,12,15,24	1500	RoHS	68
E_S-2WR3	2W	12,24	±3.3,±5,±12,±15	3000	RoHS	68
F_S-2WR3	2W	12,24	5,12,15,24	3000	RoHS	68
G_S-2WR2 Medical	2W	5,12,15,24	±5,±9,±12,±15	6000	RoHS	67
H_S-2WR2 Medical	2W	5,12,15,24	5,12,15	6000	RoHS	67
B_S-3WR2	3W	5,12	5,9,12	1500	RoHS	68
F_S-3WR2	3W	5,12,15	5,9,12,15	3000	RoHS	68

Fixed Input Voltage — DIP Package, Isolated & Unregulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
A_D-1WR2	1W	5,12,15,24	±5,±9,±12,±15,±24	1500	RoHS	69
B_D-1WR3	1W	12,15,24	3.3,5,9,12,15,24	1500	RoHS	69
E_D-1WR3	1W	5,12,15,24	±5,±9,±12,±15	3000	RoHS	69
F_D-1WR2	1W	5,12,15,24	3.3,5,12,15	3000	RoHS	69

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Fixed Input Voltage — DIP Package, Isolated & Unregulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
F_N-1WR3	1W	5,12,24	3.3,5,7.2,9,12,15,24	3000	RoHS	70
A_D-2WR2	2W	5,12,15,24	±5,±9,±12,±15,±24	1500	RoHS	71
B_D-2WR2	2W	3.3,5,9,12,24	3.3,5,9,12,15,24	1500	RoHS	71
E_D-2WR3	2W	12,24	±3.3,±5,±12,±15	3000	RoHS	71
F_D-2WR2	2W	5,12,15,24	5,9,12,15,24	3000	RoHS	71

Fixed Input Voltage — Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
IB_XT-W75R3	0.75W	5,12	3.3,5,9,12,15	1500	RoHS	73
IB_S-W75R3	0.75W	5,12,24	3.3,5,9,12,15	1500	RoHS	73
IB_XT-1WR2	1W	5,12,24	3.3,5,12,15	1500	RoHS	73
IB_LS-1WR3	1W	5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	73
IF_XT-1WR3	1W	5,12,24	3.3,5,9,12,15	3000	RoHS	73
IF_S-1WR3	1W	5,12,15,24	3.3,5,9,12,15	3000	RoHS	74
IE_KS-1WR3	1W	5	±5,±9,±12,±15	3000	RoHS	73

Wide Input Voltage — Open Frame Package, Cost-effective, Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
VCB_SO-3WR3	3W	36-75	5,12,15,24	1500	RoHS	75
VCB_SO-6WR3	6W	36-75	5,12,15,24	1500	RoHS	75
VCB_SBO-10WR3	10W	36-75	5,12,15,24	1500	RoHS	75
VCB_SBO-20WR3	20W	36-75	3.3,5,12,15,24,28	1500	RoHS	75
VCB_SBO-30WR3	30W	36-75	5,12,15,24	1500	RoHS	75
VCB_EBO-100WR3	100W	36-75	5,12,15,24,28	1500	RoHS	75
VCB_QBO-200WR3	200W	36-75	5,12,15,24	1500	RoHS	75
VCF_QBO-400W(F/H)R3	400W	36-75	12,15,24,28	2250	RoHS	75

Wide Input Voltage — Compact Size DIP/SMD Package, Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
WRA_SD/T-1WR2	1W	9-18,18-36	±5,±9,±12,±15	1500	RoHS	77
WRB_SD/T-1WR2	1W	9-18,18-36	3.3,5,12,15,24	1500	RoHS	77
WRA_SD/T-3WR2	3W	9-18,18-36	±5,±9,±12,±15	1500	RoHS	77
WRB_SD/T-3WR2	3W	9-18,18-36	3.3,5,12,15,24	1500	RoHS	77
U/VRB-J(M)D/T-3W	3W	4.5-9,9-36	3.3,5,12,15,24	1500	RoHS	78
URB_MT-3WR3	3W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS	82
VRB_J(M)D/T-6W	6W	9-18,18-36	5,12,15	1500	RoHS	79
URB_J(M)D/T-10W	10W	9-36	5,12,15	1500	RoHS	80
URB_J(M)D/T-15W	15W	9-36,18-75	3.3,5,12,15	1500	RoHS	81

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Wide Input Voltage — SIP Package, Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
WRA_S-1WR2	1W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15	1500	RoHS CE	83
WRB_S-1WR2	1W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE	83
WRE_S-1WR2	1W	4.5-9,9-18,18-36,36-75	±5,±12,±15	3000	RoHS CE	83
WRF_S-1WR2	1W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	3000	RoHS CE	83
WRA_S-3WR2	3W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15,±24	1500	RoHS CE	84
WRB_S-3WR2	3W	4.5-9,9-18,18-36,36-75	3.3,5,6,9,12,15,24	1500	RoHS CE	84
WRE_S-3WR2	3W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15	3000	RoHS CE	84
WRF_S-3WR2	3W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	3000	RoHS CE	84
URD_S-3WR3	3W	18-75	5/5,5/12,5/24	3000	RoHS CE	83
VRB_S-6WR3	6W	9-18,18-36	3.3,5,9,12,15,24	1600	RoHS CE	85
URA_S-6WR3	6W	9-36	±5,±9,±12,±15,±24	1500	RoHS CE	85
URB_S-6WR3	6W	9-36	3.3,5,9,12,15,24	1600	RoHS CE	85
VRB_S-10WR3	10W	9-18,18-36	3.3,5,9,12,15,24	1500	RoHS CE	85
URB_S-10WR3	10W	9-36	3.3,5,9,12,15,24	1500	RoHS CE	85

Wide Input Voltage — DIP Package, Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
WRA_ZP-3WR2	3W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15,±24	1500	RoHS CE	87
WRB_ZP-3WR2	3W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE	87
WRE_P-3WR2	3W	4.5-9,9-18,18-36,36-75	±3.3,±5,±9,±12,±15	3000	RoHS CE	89
WRF_P-3WR2	3W	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24	3000	RoHS CE	89
PWB_ZP-3WR2	3W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS CE	86
VRA_ZP-6WR3	6W	4.5-9,9-18,18-36,36-75	±5,±12,±15,±24	1500	RoHS CE	87
VRB_ZP-6WR3	6W	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE	87
VRA_YMD-6WR3	6W	9-18,18-36	±5,±12,±15	1500	RoHS cULus CE	91
VRB_YMD-6WR3	6W	9-18,18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE	91
URA_ZP-6WR3	6W	9-36,18-75	±5,±9,±12,±15,±24	1500	RoHS cULus CE	88
URB_ZP-6WR3	6W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE	88
URA_YMD-6WR3	6W	9-36,18-75	±5,±12,±15,±24	1500	RoHS cULus CE	91
URB_YMD-6WR3	6W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE	91
URE_P-6WR3	6W	9-36	±5,±12,±15	3000	RoHS cULus CE	89
URF_P-6WR3	6W	9-36,18-75	3.3,5,9,12,15,24	3000	RoHS cULus CE	89
URH_P-6WR3 Medical	6W	9-36,18-75	5,6,9,12,15,24	6000	RoHS CE	90
VRA_ZP-10WR3	10W	9-18,18-36,36-75	±5,±12,±15	1500	RoHS CE	88
VRB_ZP-10WR3	10W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE	88
VRA_YMD-10WR3	10W	4.5-9	±5,±12,±15,±24	1500	RoHS CE	91
VRB_YMD-10WR3	10W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE	91
URA_ZP-10WR3	10W	9-36,18-75	±5,±12,±15	1500	RoHS CE	88
URB_ZP-10WR3	10W	9-36,18-75	3.3,5,12,15,24	1500	RoHS CE	88
URA_YMD-10WR3	10W	9-36,18-75	±5,±9,±12,±15,±24	1500	RoHS cULus CE	92
URB_YMD-10WR3	10W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE	92

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Wide Input Voltage — DIP Package, Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
URD_YMD-10WR3	10W	18-75	5/5,5/12,5/24	1500	RoHS CE	96
URE_LP-10WR3	10W	9-36,18-75	±5,±12,±15	3000	RoHS cULus CE	95
URF_LP-10WR3	10W	9-36,18-75	3.3,5,9,12,15,24	3000	RoHS cULus CE	95
VRB_LD-15WR3	15W	18-36,36-75	3.3,5,12,15,24	1500	RoHS cULus CE	97
VRB_YMD-15WR3	15W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE	93
URA_YMD-15WR3	15W	9-36,18-75	±5,±12,±15,±24	1500	RoHS CE	93
URB_YMD-15WR3	15W	9-36,18-75	3.3,5,12,15,24	1500	RoHS cULus CE	93
VRA_LD-20WR3	20W	9-18,18-36,36-75	±5,±9,±12,±15,±24	1500	RoHS CE	97
VRB_LD-20WR3	20W	9-18,18-36,36-75	3.3,5,9,12,15,24,110	1500	RoHS CE	97
VRB_YMD-20WR3	20W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE	93
URA_YMD-20WR3	20W	9-36,18-75	±5,±12,±15,±24	1500	RoHS CE	93
URB_YMD-20WR3	20W	9-36,18-75	3.3,5,12,15,24	1500	RoHS cULus CE	93
URA_LD-20WR3	20W	9-36,18-75	±5,±9,±12,±15	1500	RoHS cULus CE	97
URB_LD-20WR3	20W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE	97
URD_LD-20WR3	20W	18-75	5/5,5/12,5/24	1500	RoHS CE	96
URF_LP-20WR3	20W	9-36,18-75	3.3,5,9,12,15,24	3000	RoHS cULus CE	95
URH_LP-20WR3 Medical	20W	9-36,18-75	3.3,5,12,15,24	5000VAC	RoHS CE (Pending)	90
VRB_LD-30WR3	30W	18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE	97
URA_YMD-30WR3	30W	18-75	±12,±15,±24	1500	RoHS CE	94
URB_YMD-30WR3	30W	18-75	5,12,15,24	1500	RoHS	94
URA_LD-30WR3	30W	9-36,18-75	±5,±12,±15,±24	1500	RoHS CE	98
URB_LD-30WR3	30W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE	98
URD_D-30WR3	30W	18-75	5/24	3000VAC	RoHS CE	96
VRB_LD-40WHR3	40W	18-36,36-75	5,12,15,24	1500	RoHS CE	98
URF_QB-75WR3	75W	18-75	5,12,15,24,48	2250	RoHS CE	99
URF_QB-100WR3	100W	9-36,18-75	5,12,15,24,28,48	2250	RoHS CE	99
URF_QB-150WR3	150W	18-75	5,12,15,24,48	2250	RoHS CE	99
URF_QB-200WR3	200W	18-75	5,12,15,24,48	2250	RoHS CE	99
VRB_HB-350WR3	350W	20-36	12,24,28,32	1500	RoHS CE	99

High Output Voltage — High Output Voltage, Non-isolated & Regulated Output Series

Series	Power	Input Voltage Range (VDC)	Maximum Output Voltage (VDC)	Output Voltage Range (VDC)	Output Current (mA)	Markings	Page
HO1-P(N)1251V-0.5C(F)	0.625W	12,24	+1250/-1250	0 to +1250 / 0 to -1250	0.5	RoHS	101
HO1-P(N)1251S-0.5C	0.625W	12	+1250/-1250	0 to +1250 / 0 to -1250	0.5	RoHS	101
HO1-P(N)1201-0.6B	0.72W	5	+1200/-1200	0 to +1200 / 0 to -1200	0.6	RoHS	101
HO1-P(N)1251H-1B	0.75W	5	+1250/-1250	0 to -1250,0 to +1250	1	RoHS CE	101
HO1-P(N)1251H-0.5C(D/F)	0.75W	12,15,24	+1250/-1250	0 to +1250 / 0 to -1250	0.5	RoHS	101
HO1-P(N)1501H-0.5C(D)	0.75W	12,15	+1500/-1500	0 to +1500 / 0 to -1500	0.5	RoHS	101
HO1-P601-2C	1.2W	12	+600	0 to +600	2	RoHS	101
HO1-P401V-5C	2W	12	+400	0 to +400	5	RoHS	101
HO1-P102-10F	10W	24	+1000	0 to +1000	10	RoHS	101
HO1-P102-30F	30W	24	+1000	0 to +1000	30	RoHS	101
HO1-P102-20D	40W	16	+1000	0 to +1000	20	RoHS	101
HO1-P202-20D	40W	16	+2000	0 to +2000	20	RoHS	101

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Ultra-wide Input Voltage — Isolated & Regulated Output Series

Series	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
UWE_S-1WR3	1W	4.5-36	±5,±12,±15	3000	RoHS CE	100
UWF_S-1WR3	1W	4.5-36	5,12,15	3000	RoHS CE	100
UWE_S-3WR3	3W	4.5-36	±5,±12,±15	3000	RoHS CE	100
UWF_S-3WR3	3W	4.5-36	5,12,15	3000	RoHS CE	100

Ultra-wide, Ultra-high Input Voltage — Isolated & Regulated Output Series

Series		Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
PV05/10/15-27BxxR2	Energy	5W,10W,15W	100-1000	5,9,12,15,24	4000	RoHS CE	103
PV10-27C	Energy	10W	200-1200	5/5/24	4000	RoHS	103
PV15-29BxxL	Energy	10W,15W	200-1500	5,12,15,24	4000	RoHS	105
PV15-29C	Energy	15W	200-1500	5/5/5,5/5/24	4000	RoHS	105
PV15-29BxxR3	Energy	15W	200-1500	5,12,15,24	4000	RoHS cULus CE (Pending)	105
PV15-27BxxR3	Energy	15W	100-1000	12,15,24	4000	RoHS CE	105
PV40-29B	Energy	40W	200-1500	12,15,24,17,28	4000	RoHS cULus CE CB	105
PV40-27B	Energy	40W	200-1200	12,15,24	4000	RoHS	103
PV45-29D	Energy	45W	150-1500	15/8,15/5,15/15	4000	RoHS	105
PV50-29D	Energy	50W	150-1500	15/15	4000	RoHS	105
PV50-25B	Energy	50W	120/80 - 750	12,24	4000	RoHS	107
PV60-27D	Energy	60W	200-1100	12/15	4000	RoHS	103
PV75-36D	Energy	75W	250-3300	15,400	6000	RoHS	107
PV120-27B	Energy	90W,100W,120W	200-1100	12,15,24,26,28,48	4000	RoHS	103
PV150-29B	Energy	120W,150W	250-1500	12,15,24,28,32,48	4000	RoHS CE CB (Pending)	105
PV200-29B	Energy	200W	300-1500	24,32,48	4000	RoHS CE CB	105
PV200-27B	Energy	120W,150W,200W	200-1000	12,15,24,26,48	4000	RoHS CE	103

Charging — Ultra-wide Input Voltage, Specialized for Super-capacitor and Lithium Battery-powed (Bidirectional Charging Power Supply)

Series		Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
URF2428LP-700	Electric power	9-36	0-28.5	1500	RoHS	108
URB24A5YMD-1000-CL	Electric power	9-36	0-5.06	1500	RoHS	108

Automotive — Wide Input Voltage, Specialized for Automotive Industry, Isolated & Regulated Output Series

Series		Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
CWRF_S-3W	Automotive	3W	7-18	15	4300VDC	RoHS CE	109
CUWF_J(Y)T-3WR3	Automotive	3W	6-42	5,12,15,24	3000VAC	RoHS CE	109
CVRC_JD-6WR3	Automotive	6W	9-18	15/15/15	3000VDC	RoHS CE	109
CUWF_J(Y)T-6WR3	Automotive	6W	6-42	5,12,15,24	3000VAC	RoHS CE	109
CUWB_YMD-6WR3	Automotive	6W	4.5-36	3.3,5,12,15,24	1500VDC	RoHS CE	110
CUWF1215YMD-8WR3	Automotive	8W	4.5-36	15	2600VAC	RoHS CE	110

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Automotive — Fixed Input Voltage, Specialized for Automotive Industry, Isolated & Unregulated Output Series

Series		Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
CF0505XT-1WR3	Automotive	1W	5	5	3500	RoHS CE	108
CFB0505XT-1WR3	Automotive	1W	5	5	4200	RoHS CE	108

Railway — Wide Input Voltage, Specialized for Railway Industry, Isolated & Regulated Output Series

Series		Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation (VDC)	Markings	Page
URA1D_YMD-6WR3	Railway	6W	40-160	±5,±12,±15	2250VDC	RoHS CE	111
URB1D_YMD-6WR3	Railway	6W	40-160	5,12,15,24	2250VDC	RoHS CE	111
URA1D_(X)LMD-10WR3	Railway	10W	40-160	±5,±12,±15	2250VDC	RoHS CE	111
URB1D_LMD-10WR3	Railway	10W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE	111
URB1D_LMD-15WR3	Railway	15W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE	111
URB1D_LMD-20WR3	Railway	20W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE	111
URB1D_LD-20WR3	Railway	20W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE	111
URE1D_LD-20WR3	Railway	20W	40-160	±12,±15,±24	3000VDC	RoHS	111
URF1D_LD-40WR3	Railway	40W	40-160	3.3,5,12,15,24,48	3000VDC	RoHS CE	112
UWTH1D_QB-50WR3	Railway	50W	14-160	3,5,12,15,24,48,54	3000VAC	RoHS	112
URF1D_QB-50WR3	Railway	50W	43-160	3.3,5,12,15,24,48	3000VAC	RoHS CE	113
URF1D_QB-75WR3	Railway	75W	43-160	3.3,5,12,15,24,48	3000VAC	RoHS CE	113
URF1D_QB-100WR3	Railway	100W	43-160	3.3,5,12,15,24,48	3000VAC	RoHS CE	113
UWTH1D_QB-100WR3	Railway	100W	14-160	12,15,24,28,48,54	3000VAC	RoHS	113
UWTH1D_HB-100WR3	Railway	100W	14-160	12,24,28,48,54	3000VAC	RoHS	113
URF1D_HB-150WR3	Railway	150W	43-160	5,12,15,24,48	3000VAC	RoHS	113
UWTH1D_HB-200W(H)R3	Railway	200W	14-160	12,24,28,48,54	3000VAC	RoHS	113
URF1D_HB-250WR3	Railway	250W	40-160	5,12,15,24,48,54	3000VAC	RoHS	113
URF1D_FB-400W(H)R3	Railway	400W	66-160	5,9,12,15,24,28,48,54	3000VAC	RoHS	113

Non-isolated — Wide Input Voltage, Non-isolated & Regulated Output Series

Series	Input Voltage(VDC)	Output Voltage(VDC)	Output Current (mA)	Markings	Page
K78U24-300R3(L)	36-90	24	300	RoHS CE	115
K78U-500R3(L)	9-90	3.3,5,6.5,9,12,15	500	RoHS CE	115
K78_MT-500R4	4.5-36	±3.3,±5,±6.5,±9,±12,±15	500	RoHS CE	115
K78_MT-1000R4	4.75-36	±3.3,±5,±6.5,±9,±12,±15	1000	RoHS	115
K78-500R3	4.75-36	3.3,5,9,12,15,-5,-12,-15	500/-300/-150	RoHS cULus CE	115
K78-JT-500R3	4.75-36	3.3,5,9,12,15	500	RoHS CE	115
K78T-500R3	4.75-36	1.5,1.8,2.5,3.3,5,6.5,9,12,15	500	RoHS CE	115
K78T-1000R3	4.75-36	1.5,1.8,2.5,3.3,5,6.5,9,12	1000/800	RoHS CE	117
K78-1000R3(L)	6-36	3.3,5,9,12,15,-5,-12,-15	1000/-500/-300	RoHS cULus CE	117
K78_M-1000R3	6-36	3.3,5,9,12,15,-5,-12,-15	1000/-500/-300	RoHS CE	117
K78-2000R3	6-36	3.3,5,9,12,15	2000	RoHS CE	117
K78Lxx-500R3	6-36	5,12,15	500/-150/-300	RoHS cULus CE	117
K78Lxx-1000R3	6-36	3,5,12,15	1000/-500/-300	RoHS cULus CE	117
K78(L)xx-3AR3	8-36	5,6.5,12,15	3000	RoHS	117
K12T-6A-P(N)	8.3-14	0.75-5.5	6000	RoHS CE	119
K12T-10A/16A	8.3-14	0.75-5.5	10000/16000	RoHS CE	119
KUB4824QB-10A	30-75	24	10000	RoHS CE	120
KUB4812QB-10A	16-75	12	10000	RoHS CE	120

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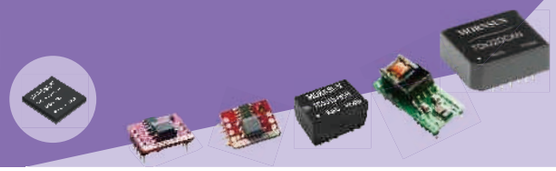
Industrial Bus Isolated Transceiver Module



CAN — CAN Bus Isolated Transceiver Module

Series	Package	Integrated Power Supply or Not	Product Type	Communication Charecteristics	Input Voltage	Baud Rate	Nodes	Markings	Page
TDA51SCANHC	SOIC	YES	Single channel high-rate	CAN	4.5-5.5VDC	1Mbps	110	RoHS	121
TD041SCANH	DFN	NO	Single channel high-rate	CAN	2.375-5.5,4.75-5.25VDC	40k-1Mbps	110	RoHS	121
TD041SCANFD	DFN	NO	Single channel high-rate	CANFD	2.375-5.5,4.5-5.5VDC	40k-5Mbps	110	RoHS	121
TD(H)541SCANH	DFN	YES	Single channel high-rate	CAN	4.75-5.25VDC	40k-1Mbps	110	RoHS	121
TD(H)541SCANFD	DFN	YES	Single channel high-rate	CANFD	4.75-5.25VDC	40k-5Mbps	110	RoHS	121
TD331/531SCANH	SMD	YES	Single channel high-rate	CAN	3.15-3.45,4.75-5.25VDC	40k-1Mbps	110	RoHS CE	121
TD331/531SCANFD	SMD	YES	Single channel general	CANFD	3.15-3.45,4.75-5.25VDC	40k-5Mbps	110	RoHS CE	121
CTD331/531SCANH	SMD	YES	Automotive grade single channel high-rate	CAN	3.15-3.45,4.75-5.25VDC	40k-1Mbps	110	RoHS CE	121
TD321/521SCAN	SMD	YES	Single channel general	CAN	3.15-3.45,4.75-5.25VDC	5k-1Mbps	110	RoHS CE	121
TD321/521SCANH	SMD	YES	Single channel high-rate	CAN	3.15-3.45,4.75-5.25VDC	40k-1Mbps	110	RoHS CE	121
TD322/522DCAN	DIP	YES	Dual channels general	CAN	3.15-3.45,4.75-5.25VDC	40k-1Mbps	110	RoHS CE	121
TD301/501DCANHE	DIP	YES	Single channel high surge protective	CAN	3.15-3.45,4.75-5.25VDC	20k-1Mbps	110	RoHS CE	121
TD301/501DCANH-W	DIP	YES	Single channel wake-up high-rate	CAN	3.15-3.45,4.75-5.25VDC	40k-1Mbps	110	RoHS	121

485 — RS-485 Bus Isolated Transceiver Module

Series	Package	Integrated Power Supply or Not	Product Type	Communication Charecteristics	Input Voltage	Baud Rate	Nodes	Markings	Page
TD041S485H	DFN	NO	High-rate half-duplex	485	2.375-5.5,4.5-5.5VDC	1Mbps	256	RoHS	123
TD(H)541S485H	DFN	YES	High-rate half-duplex	485	4.75-5.25VDC	1Mbps	256	RoHS	123
TD041S485S-F	DFN	NO	Full-duplex	485	2.375-5.5,4.5-5.5VDC	20Mbps	256	RoHS	123
TD(H)541S485S-F	DFN	YES	Full-duplex	485	4.75-5.25VDC	20Mbps	256	RoHS	123
TD041S485H-A	DFN	NO	Automatic send/receive	485	2.375-5.5,4.5-5.5VDC	500kbps	256	RoHS	123
TD(H)541S485H-A	DFN	YES	Automatic send/receive	485	4.75-5.25VDC	500kbps	256	RoHS	123
TD041S485S	DFN	NO	Utral-high rate half-duplex	485	2.375-5.5,4.5-5.5VDC	20Mbps	256	RoHS	123
TD(H)541S485S	DFN	YES	Utral-high rate half-duplex	485	4.75-5.25VDC	20Mbps	256	RoHS	123
TD331/531S485	SMD	YES	General half-duplex	485	3.15-3.45,4.75-5.25VDC	19.2kbps	64	RoHS CE	125
TD331/531S485-L	SMD	YES	Low power consumption half-duplex	485	3.15-3.45,4.75-5.25VDC	19.2kbps	16	RoHS CE	125
TD331/531S485H	SMD	YES	High-rate half-duplex	485	3.15-3.45,4.75-5.25VDC	150kbps	128	RoHS CE	125
TD331/531S485H-A	SMD	YES	Automatic send/receive	485	3.15-3.45,4.75-5.25VDC	150kbps	128	RoHS CE	125
TD331/531S485H-E	SMD	YES	High-rate enhanced half-duplex	485	3.15-3.45,4.75-5.25VDC	500kbps	256	RoHS CE	125
TD322/522D485H-A	DIP	YES	Two-way automatic send/receive	485	3.15-3.45,4.75-5.25VDC	120kbps	32	RoHS CE	125
TD321/521S485	SMD	YES	General half-duplex	485	3.15-3.45,4.75-5.25VDC	19.2kbps	64	RoHS CE	125
TD321/521S485H	SMD	YES	High-rate half-duplex	485	3.15-3.45,4.75-5.25VDC	200kbps	64	RoHS CE	125
TD321/521S485H-A	SMD	YES	Automatic send/receive	485	3.15-3.45,4.75-5.25VDC	500kbps	128	RoHS CE	125
TD321/521S485H-E	SMD	YES	High-rate enhanced half-duplex	485	3.15-3.45,4.75-5.25VDC	500kbps	256	RoHS CE	125
TD301/501M485	DIP	YES	High-rate compact size half-duplex	485	3.15-3.45,4.75-5.25VDC	500kbps	64	RoHS CE	125

232 — RS-232 Bus Isolated Transceiver Module

Series	Package	Integrated Power Supply or Not	Product Type	Communication Charecteristics	Input Voltage	Baud Rate	Nodes	Markings	Page
TD041S232H	DFN	NO	Single channel high-rate	232	2.375-5.5,4.5-5.5VDC	120kbps	1	RoHS	127
TD(H)541S232H	DFN	YES	Single channel high-rate	232	4.5-5.5VDC	120kbps	1	RoHS	127
TD331/531S232H	SMD	YES	Single channel high-rate	232	3.15-3.45,4.75-5.25VDC	0-115.2kbps	1	RoHS CE	127
TD302/502D232H	SMD	YES	Dual channels high-rate	232	3.0-3.6,4.5-5.5VDC	0-115.2kbps	2	RoHS	127

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Industrial Bus Isolatied Transceiver Module

Digital Signal — Digital Isolators

Series	Product Type	Integrated Power Supply or Not	Communication Charecteristics	Isolation (VAC)	Input Voltage (VDC)	Baud Rate	Operating Temperature	Package	Markings	Page
TDA51S-41HC	Quad channels high-rate	YES	Digital signal	5000	3.0-5.25	150Mbps	-40 to125℃	DFN	RoHS	131
TD541S-4xH5	Quad channels high-rate	YES	Digital signal	3750	4.75-5.25	150Mbps	-40 to125℃	DFN	RoHS	131
TD541S-4xL5	Quad channels high-rate	YES	Digital signal	3750	4.75-5.25	150Mbps	-40 to125℃	DFN	RoHS	131
TD541S-4xH3	Quad channels high-rate	YES	Digital signal	3750	4.75-5.25	150Mbps	-40 to125℃	DFN	RoHS	131
TD541S-4xL3	Quad channels high-rate	YES	Digital signal	3750	4.75-5.25	150Mbps	-40 to125℃	DFN	RoHS	131

TLA — AC/DC Power Supply with Integrated Isolated Transceiver Module

Series	Function	Input Voltage	Baud Rate	Nodes	Markings	Page
TLAxx-03KCAN	AC/DC power supply with integrated isolated CAN module	85-305VAC/100-430VDC	5-1000kbps	110	RoHS CE	128
TLAxx-03K485	AC/DC power supply with integrated isolated RS485 module	85-305VAC/100-430VDC	500kbps	128	RoHS CE	128
TLAxx-03K485L	AC/DC power supply with integrated isolated RS485 module	85-305VAC/100-430VDC	19.2kbps	128	RoHS CE	128

TLA — Current Transducer

Series	Package	Function	Structure	Input Voltage	Current Measurement Range	Turns Ratio	Markings	Page
TLAX00-S	Closed-loop type C/L	High precision hall current transducer	Disc-type	±12/±15VDC	±100A～±1000A	1:2000	RoHS	129

TDxUSPCAN — Protocol Conversion Module

Series	Function	Input Voltage	Baud Rate	Nodes	Markings	Page
TD3USPCAN	Protocol conversion module	3.15-3.45VDC	5k-1Mbps	110	RoHS CE	129
TD5USPCAN	Protocol conversion module	4.75-5.25VDC	5k-1Mbps	110	RoHS CE	129

SCM — Industrial Bus Signal Interface Chips

Series	VCC Voltage Range (V)	Bus Type	Duplex Mode	Baud Rate (Mbps)	No. of Channels	Interface Withstand Voltage (V)	Dominant Timeout Function	Nodes	Package	Page
SCM3403A	3.0-5.5	RS-485	Half-duplex	12	1	-36 to +36	/	256	SOP-8	130
SCM3421A	4.5-5.5	CAN	Half-duplex	1	1	-36 to +36	None	110	SOP-8	130
SCM3422A	4.5-5.5	CAN	Half-duplex	1	1	-40 to +40	Available	110	SOP-8	130
SCM3423A	4.5-5.5	CAN	Half-duplex	1	1	-40 to +40	Available	110	SOP-8	130

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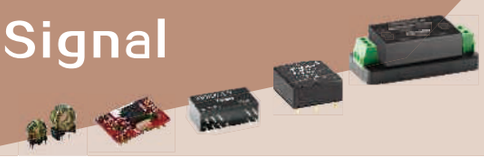
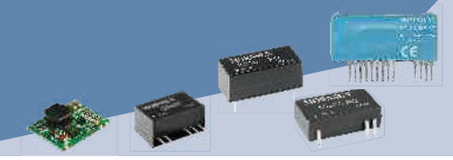
EMC Auxiliary Device / Signal Conditioning Module



LED Driver / IGBT Driver



F EMC Auxiliary Device

Series	Function	Input Voltage Range	Max. Output Power/Current	Markings	Page
FC-LX1D	EMC filter	85-305VAC	1.5A	RoHS	132
FC-LX1D2	EMC filter	85-305VAC	1.5A	RoHS	132
FC-LX1DR2	EMC filter	85-305VAC	0.2A	RoHS	132
FC-L01DV1	EMC filter	85-305VAC	0.3A	RoHS	132
FC-AX3D	EMC filter	10-36VDC	30W	RoHS	132
FC-B02D	EMC filter	18-75VDC	30W	RoHS	132
FC-D03D	EMC filter	18-36VDC	50W	RoHS	132
FC-E03D	EMC filter	36-75VDC	75W	RoHS	132
FC-A01D	EMC filter	9-36VDC	1A	RoHS	132
FC-B01D	EMC filter	18-75VDC	1A	RoHS	132
FC-C01D	EMC filter specialized for Railway	40-160VDC	10W	RoHS	133
FC-CX1D	EMC filter specialized for Railway	40-160VDC	30W	RoHS	133
FC-C03D	EMC filter specialized for Railway	40-160VDC	50W	RoHS	133
FC-CX3D	EMC filter specialized for Railway	66-160VDC	100W	RoHS	133
FI-B03D	DC/DC EMI filter	0-80VDC	3A	RoHS	133
FT-AX1D	DC/DC Pulse Group Suppressor	0-40VDC	1.5A	RoHS	134
FT-BX1D	DC/DC Pulse Group Suppressor	0-80VDC	1.5A	RoHS	134
FS-TD01D	485-AB bus surge protection module	0-5VDC	≤0.1	RoHS	134
FL2D	Common mode filter	/	0.5,1,3A	RoHS	135

T Signal Conditioning Module

Series	Package	Product Type	Isolation Characteristics	Input Signal	Output Signal	Isolation	Markings	Page
TN_T	SMD	Signal self-driving module	Two-terminal isolation	0-2.5V,0-5V,0-10V	0/4-10mA,0-2.5/5/10V	2500VDC	RoHS CE	136
TE_N	DIP	Active high precision positive signal	Two-terminal isolation	0-5V,0-10V,4-20mA	0-5V,0-10V	2000VAC	RoHS CE	138
TE_T	SMD	Active high precision positive signal	Two-terminal isolation	4-20mA,0-5V	0-5V,0-5V	2000VAC	RoHS	137
TE_AN	DIP	Active high precision positive signal	Two-terminal isolation	±5V,±10V	0-5V,0-10V	2000VAC	RoHS CE	138
TE_CN	DIP	Active high precision positive signal	Two-terminal isolation	±5V,±10V	±5V,±10V	2000VAC	RoHS CE	138
TEM_AN	DIP	Active, mV-class, positive and nagtive signal	Two-terminal isolation	±75/±100mV	0-5V	2000VAC	RoHS CE	138
TEM_CN	DIP	Active, mV-class, positive and nagtive signal	Two-terminal isolation	±50/±100/±200mV	±5/±10V	2000VAC	RoHS CE	138
TF_N	DIP	Active high precision output signal	Two-terminal isolation	0-5V,0-10V	0/4-20mA,0-5V,0-10V	2000VAC	RoHS CE	139
TF_GN	DIP	Active high precision output signal	Two-terminal isolation	0-5V	±10V	2000VAC	RoHS CE	139
TFW_N	DIP	Active high precision PWM output signal	Two-terminal isolation	PWM signal 0-100%	0-20mA,0-10V	2000VAC	RoHS CE	139
T_P	DIP	Active high precision signal (versatile)	Four-terminal isolation	0/4-20mA,0-5V,0-10V	0/4-20mA,0-5V,0-10V	2500VDC	RoHS	140
T_CP	DIP	Active high precision signal (versatile)	Three-terminal isolation	±5V,±10V	±5V/±10V	2500VDC	RoHS	140
TM_P	DIP	Active high precision (mV-class input) signal	Three-terminal isolation	0-10/20/30/50/75/100mV	0/4-20mA,0-5V,0-10V	2500VDC	RoHS	141
TM_CP	DIP	Active high precision (mV-class input) signal	Three-terminal isolation	±10/±20/±50/±75/±100/±200mV	±5/±10V	2500VDC	RoHS	141
T1100N	DIP	Passive high precision signal	Two-terminal isolation	4-20mA	4-20mA	3000VDC	RoHS CE	142
T1100L	SIP	Passive high precision signal	Two-terminal isolation	4-20mA	4-20mA	3000VDC	RoHS CE	142
T1100L-F	SIP	Passive module (loop power supply)	Two-terminal isolation	4-20mA	4-20mA	3000VDC	RoHS CE	142
T_HL	SIP	Two-wire loop power supply signal (with HART)	Two-terminal isolation	0-2.5V	3.7-22mA	2000VAC	RoHS CE	142
T_L	SIP	Two-wire loop power supply signal	Three-terminal isolation	0-2.5V	3.7-22mA	2000VAC	RoHS CE	142
TRP_P	DIP	Active detection type RTD signal	Three-terminal isolation	Pt100(0-500℃)	4-20mA	2000VAC	RoHS CE	143
TRP_HN	DIP	Two-channel RTD temperature detection	Two-terminal isolation	Pt100(-200to850℃)	IIC信号	3750VAC	RoHS	143
TE_HN	DIP(open-frame)	Active high precision high isolated signal	Two-terminal isolation	0-5V	0-5V	4000VAC	RoHS	143

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KC LED Driver

Series	Input Voltage Range(VDC)	Output Voltage(VDC)	Output Current (mA)	Markings	Page
KC24H-1000	5.5-48	3.3-36	1000	RoHS	144
KC24H-1200	5.5-48	3.3-36	1200	RoHS	144
KC24H-R	5.5-46	3.3-36	0-300,0-350,0-500,0-600,0-700	RoHS	144
KC24W	5.5-48	3.3-36	0-300,0-350,0-500,0-600,0-700	RoHS	144
KC24JT-R3	6-36	3.3-36	300,700	RoHS	144

QP Hybrid Integrated IGBT Driver (Built-in Isolated DC/DC Converter)

Series	Power Supply (VDC)	Input Voltage Range(VDC)	Output High-level Voltage VOH (VDC)	Output Low-level Voltage VOL (VDC)	Max. Driving Current (A)	Max. Frequency (Khz)	Isolation	Markings	Page
QP12W08S-37	15	14.5-15.5	15	-9	±8	20	3750VAC	RoHS CE	145
QP12W08S-37A	12	11.6-12.4	15	-9	±8	20	3750VAC	RoHS CE	145

QC Hybrid Integrated IGBT Driver (Built-in Isolated DC/DC Converter)

Series	Power Voltage VCC (VDC)	Power Supply VEE (VDC)	Gate Voltage (VDC)	Max. Driving Current (A)	Max. Frequency (Khz)	No. of Channels	Isolation	Markings	Page
QC962-8A	14-18	8	+14/-9	±8	40	1	3750VAC	RoHS	145

QA DC/DC Converter for SiC MOSFET Driver

Series	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage Vo1 (VDC)	Output Voltage Vo2 (VDC)	Output Current (mA)	Effiency	Isolation	Markings	Page
QA01C	15	13.5-16.5	+20	-4	+100/-100	80	3500VAC	RoHS cULus CE	146
QA051C	5	4.5-5.5	+20	-5	+80/-40	79	3000VAC	RoHS	146
QA1201C-20	12	10.8-13.2	+20	-4	+100/-100	80	3500VAC	RoHS	146
QA121C2	12	10.8-13.2	+15	-3.5	+111/-111	81	3500VAC	RoHS	146
QA121C-20	12	10.8-13.2	+20	-5	+100/-100	79	3500VAC	RoHS	146
QA151C	15	13.5-16.5	+20	-5	+80/-40	78	3500VAC	RoHS	146
QA01C-18	15	13.5-16.5	+18	-3	+100/-100	79	3500VAC	RoHS	146
QA151C3	15	13.5-16.5	+15	-4	+100/-100	82	3000VDC	RoHS	146
QA151M	15	14.4-15.9	+15	-5	+100/-100	80	3500VAC	RoHS	146
QA2401C-20	24	21.6-26.4	+20	-4	+100/-100	80	3500VAC	RoHS	146

QA DC/DC Converter for IGBT Driver

Series	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage Vo1 (VDC)	Output Voltage Vo2 (VDC)	Output Current (mA)	Effiency	Isolation	Markings	Page
QAW01	12	9-18	+15	-9	+200	85	3500VAC	RoHS	147
QA121	12	11.4-12.6	+15	-8	+120/-120	81	3000VAC	RoHS	146
QA04	12	9-15	+15	-8	+100/-80	80	3000VAC	RoHS cULus CE	146
QA02	12	11.6-12.4	+15	-8.7	+80/-40	80	3000VAC	RoHS cULus CE	146
QA01-A09	15	14.5-15.5	+9	-9	+55/-55	80	3000VAC	RoHS cULus CE	146
QA01-09	15	14.5-15.5	+9	--	+111/--	80	3000VAC	RoHS cULus CE	146
QA01	15	14.5-15.5	+15	-8.7	+80/-40	80	3000VAC	RoHS cULus CE	146
QA151	15	14.25-15.75	+15	-8	+120/-120	81	3000VAC	RoHS	146
QA01-17	15	14.5-15.5	+17	-8.7	+80/-40	80	3000VAC	RoHS cULus CE	146
QA15115R2	15	13.5-16.5	+15	-2.5	+100/-100	80	3500VAC	RoHS	146
QA156D-24	15	13.5-16.5	+24	+24	+150/0	80	12000VDC	RoHS CE	147
QA152D	15	13.5-16.5	+15	-9	+200/-200	87	4000VAC	RoHS CE	147
QAU242D2G	24	9-36	+24	+24/+24	+150/+150	85	4200VAC	RoHS	147
QAW02	24	18-36	+15	-9	+200/-200	85	3000VDC	RoHS	147
QA03	24	23.3-24.7	+15	-8.7	+80/-40	80	3000VAC	RoHS cULus CE	147
QA241	24	22.8-25.2	+15	-8	+120/-120	81	3000VAC	RoHS	146

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Pin-Out Details

DC/DC Converter Pin-Out

Vin	+Input
GND	Input GND
+Vo	+Output
0V	Output GND
-Vo	Output
DC(-Vin)	-Input
DC(+Vin)	+Input
Vadj	Voltage Adjustable
Vref	Baseline Pins
Ctrl	ON/OFF Control Function
CASE	Connecting to the Pins of the Metal Enclosure
ON/OFF	ON/OFF Control, UVLO & Starting
	Time Delay Function
CS	With External Capacitance(Reduce Ripple)
Trim	Output Voltage Adjustable
-Sense	Voltage Output Remote Compensation(Output GND)
+Sense	Voltage Output Remote Compensation(Output+)
NC	No Electrical Connection
No Pin	No Pin
HV	High Voltage

AC/DC Converter Pin-Out

AC(N)	Neutral Wire
AC(L)	Live Wire
-Vo	-Output
+Vo	+Output
Trim	Output Voltage Adjustable
COM	Common
⏚	GND Protection
+V(CAP)	+External Capacitance
-V(CAP)	-External Capacitance
NC	No Electrical Connection
No Pin	No Pin

Isolation Transmitter Module Pin-Out

Pin+	Power Supply+
Pin-	Power Supply-
Pout+	Isolated Output+
Pout-	Isolated Output-
Pgnd	Isolated Output GND
Vo	Output
+Poss	+Isolated Power, Output
-Poss	-Isolated Power, Output
FB	Input Feedback
Icom	Input Common
Ocom	Output Common
Pin com/GND	Power Common
Io	Current Output
Sin+	Signal Input+
Sin-	Signal Input-
Sout+	Signal Output+
Sout-	Signal Output-
+Piss	+Isolated Power, Input
-Piss	-Isolated Power, Input
-IN	-Input
+IN	+Input
Pin	Power supply
Iin	Current Input
Adj	Gain Adjustable
GR	Gain auxiliary regulation
SG	Gain regulation
ZR	Zero auxiliary regulation
SZ	Zero regulation

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MORNSUN®

23 Years of R & D Experience

REACH RoHS CB Report

Enclosed SMPS

85-305VDC Input | 85-264VDC Input | DIN-Rail | Open Frame

LM/LMF Series (15-320W) 305RAC

LM/LMF Series (35-1000W)

LI/LIF Series (30-480W)

LOF Series (120-550W)

On-board Products

AC/DC Converter | DC/DC Converter | Transceiver Module

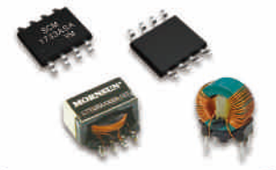
(1-550W)

(0.25-400W)

CAN/485 Series

Discrete Solution

IC & Transformer | EMC Auxiliary | Others



Current transducer system power solutions

LM Series 15–150W Enclosed Switching Power Supply (Single Output)

Features:

- Input voltage: 85-305VAC/120-430VDC
- Accepts AC or DC input (dual-use of same terminal)
- Operating temperature: -30℃ to +70℃
- High efficiency, low standby power consumption
- Isolation voltage 4000VAC
- Low ripple & noise
- Output short circuit, over-current, over-voltage protection
- Meets IEC/EN/UL62368, EN60335, EN61558, GB4943 standards
- Over-voltage class III (designed to meet EN61558)
- Operating altitude up to 5000m
- Both sides with conformal coating

305RAC

LM15–23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM15-23B03	9.9W	85-305VAC/ 100-430VDC	3.3V/3.0A	73
LM15-23B05	15W		5V/3.0A	78
LM15-23B12	15.6W		12V/1.3A	82
LM15-23B15	15W		15V/1.0A	82
LM15-23B24	15W		24V/0.625A	83
LM15-23B48	15.36W		48V/0.32A	83

LM25–23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM25-23B03	19.8W	85-305VAC/ 100-430VDC	3.3V/6A	78
LM25-23B05	25W		5V/5A	81
LM25-23B12	25.2W		12V/2.1A	85
LM25-23B15	25.5W		15V/1.7A	86
LM25-23B24	26.4W		24V/1.1A	87
LM25-23B48	27.36W		48V/0.57A	88

LM35–23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM35-23B05	35W	85-305VAC/ 100-430VDC	5V/7A	81
LM35-23B12	36W		12V/3A	85
LM35-23B15	36W		15V/2.4A	86
LM35-23B24	36W		24V/1.5A	87

LM50-23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM50-23B05	50W	85-305VAC/ 100-430VDC	5V/10A	83
LM50-23B12	50.4W		12V/4.2A	86
LM50-23B15	51W		15V/3.4A	87
LM50-23B24	52.8W		24V/2.2A	88
LM50-23B36	52.2W		36V/1.45A	89
LM50-23B48	52.8W		48V/1.1A	90

LM75–23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM75-23B05	70W	85-305VAC/ 100-430VDC	5V/14A	85
LM75-23B12	72W		12V/6A	87
LM75-23B15	75W		15V/5A	87
LM75-23B24	76.8W		24V/3.2A	89
LM75-23B36	75.6W		36V/2.1A	89
LM75-23B48	76.8W		48V/1.6A	90.5

LM100–23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM100-23B05	90W	85-305VAC/ 100-430VDC	5V/18A	85.5
LM100-23B12	102W		12V/8.5A	87
LM100-23B15	105W		15V/7.0A	87
LM100-23B24	108W		24V/4.5A	89.5
LM100-23B36	100.8W		36V/2.8A	89.5
LM100-23B48	110.4W		48V/2.3A	90.5

LM150–23Bxx

cULus CE CCC RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM150-23B12	150W	85-305VAC/ 100-430VDC	12V/12.5A	86
LM150-23B15	150W		15V/10A	87
LM150-23B24	156W		24V/6.5A	88
LM150-23B36	154.8W		36V/4.3A	88
LM150-23B48	158.4W		48V/3.3A	89
LM150-23B55	150.15W		55V/2.73A	90

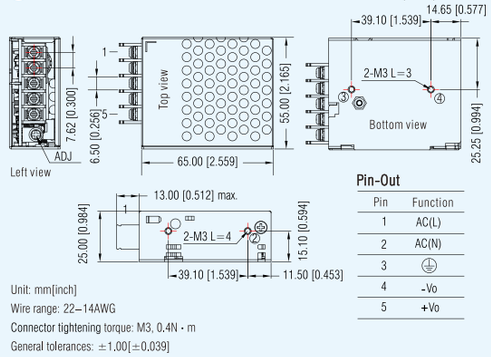
Note: All models have a variant.

① Terminal with protective cover series: with the suffix "-C".

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

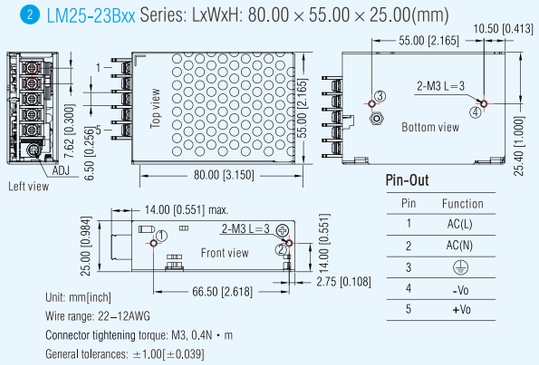
① LM15-23Bxx Series: LxWxH: 65.00 × 55.00 × 25.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo
5	+Vo

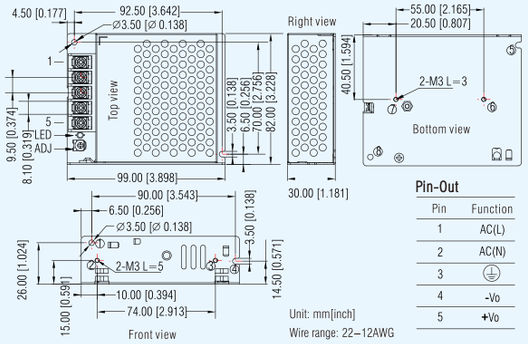
② LM25-23Bxx Series: LxWxH: 80.00 × 55.00 × 25.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo
5	+Vo

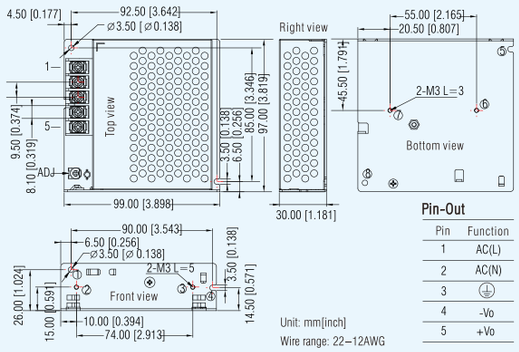
③ LM35/50-23Bxx Series: LxWxH: 99.00×82.00×30.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo
5	+Vo

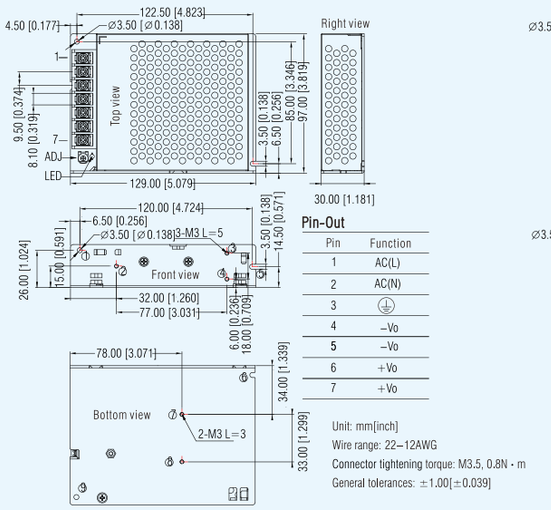
④ LM75-23Bxx Series: LxWxH: 99.00×97.00×30.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo
5	+Vo

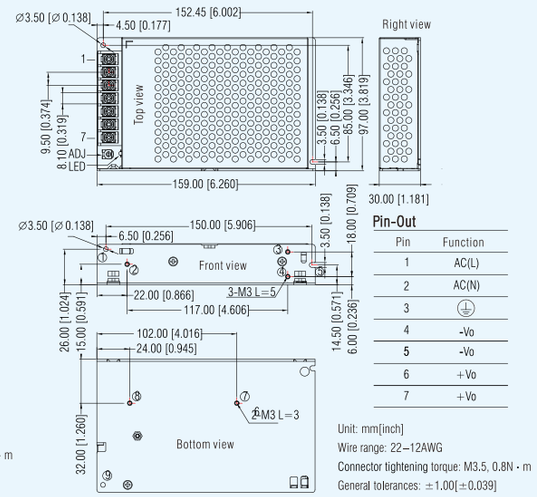
⑤ LM100-23Bxx Series: LxWxH: 129.00 × 97.00 × 30.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	–Vo
5	–Vo
6	+Vo
7	+Vo

⑥ LM150-23Bxx Series: LxWxH: 159.00 × 97.00 × 30.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo
5	-Vo
6	+Vo
7	+Vo

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LM Series 200-600W Enclosed Switching Power Supply (Single Output)

Features:

- Input voltage: 176-264VAC/240-373VDC
  90-132VAC/180-264VAC
- Operating temperature: -30℃ to +70℃
- Low standby power consumption, high efficiency, low ripple & noise
- Isolation voltage 4000VAC
- Output short circuit, over-current, over-voltage, over-temperature protection
- Over-voltage class III (designed to meet EN61558)
- Operating altitude up to 5000m
- Meets IEC/EN/UL62368, IEC/EN60335, IEC/EN61558, GB4943 standards

LM200-10Bxx

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM200-10B05	150W	90-132VAC/ 180-264VAC	5V/30A	87
LM200-10B12	204W		12V/17A	87.5
LM200-10B15	210W		15V/14A	88
LM200-10B24	211.2W		24V/8.8A	88.5
LM200-10B36	212.4W		36V/5.9A	89
LM200-10B48	211.2W		48V/4.4A	89.5

LM350-10Bxx

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM350-10B05	300W	90-132VAC/ 180-264VAC	5V/60A	83.5
LM350-10B12	348W		12V/29A	85
LM350-10B15	348W		15V/23.2A	86
LM350-10B24	350.4W		24V/14.6A	87
LM350-10B36	349.2W		36V/9.7A	88
LM350-10B48	350.4W		48V/7.3A	88.5

LM450-12Bxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM450-12B12	450W	176-264VAC/ 240-373VDC	12V/37.5A	85
LM450-12B15	450W		15V/30A	86
LM450-12B24	451.2W		24V/18.8A	87
LM450-12B27	450.9W		27V/16.7A	87
LM450-12B36	450W		36V/12.5A	87.5
LM450-12B48	451.2W		48V/9.4A	88

LM600-12Bxx

RoHS

Product Program

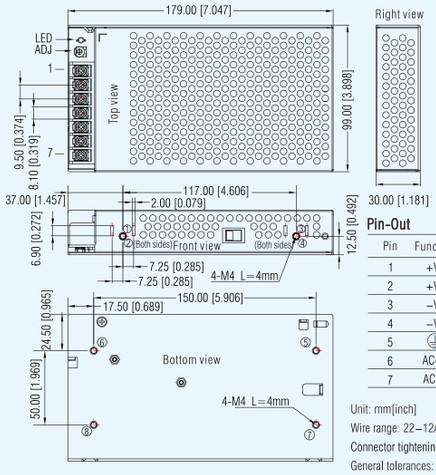
Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LM600-12B12	600W	176-264VAC/ 240-373VDC	12V/50A	85
LM600-12B15	600W		15V/40A	86
LM600-12B24	600W		24V/25A	87
LM600-12B27	599.4W		27V/22.2A	87
LM600-12B36	597.6W		36V/16.6A	87
LM600-12B48	600W		48V/12.5A	88

Note: All models have two variants.
① Terminal with protective cover series: with the suffix "-C";
② Products with conformal coating series: with the suffix "-Q".

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

① LM200-10Bxx Series: LxWxH: 179×99×30(mm)

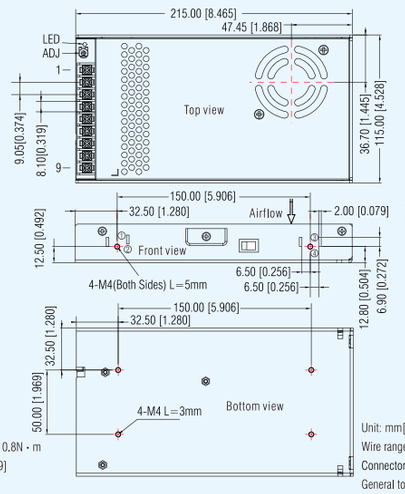


Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	-Vo
4	-Vo
5	⏚
6	AC(N)
7	AC(L)

Unit: mm[inch]
Wire range: 22-12AWG
Connector tightening torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]

② LM350-10Bxx Series: LxWxH: 215×115×30(mm)

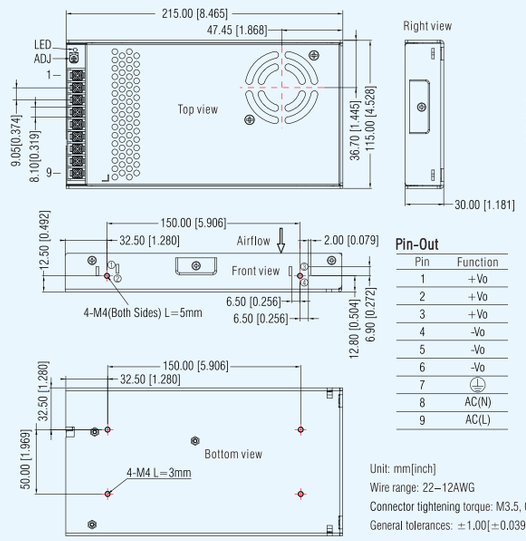


Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	+Vo
4	-Vo
5	-Vo
6	-Vo
7	⏚
8	AC(N)
9	AC(L)

Unit: mm[inch]
Wire range: 22-12AWG
Connector tightening torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]

③ LM450-12Bxx Series: LxWxH: 215.00×115.00×30.00(mm)

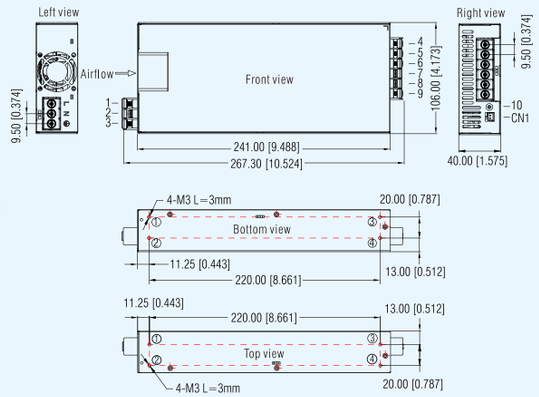


Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	+Vo
4	-Vo
5	-Vo
6	-Vo
7	⏚
8	AC(N)
9	AC(L)

Unit: mm[inch]
Wire range: 22-12AWG
Connector tightening torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]

④ LM600-12Bxx Series: LxWxH: 267.30×106.00×40.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	+Vo
5	
6	
7	-Vo
8	
9	
10	ADJ Output adjustable resistor

Unit: mm[inch]
Wire range: 22-12AWG
Connector tightening torque: M4, 0.8N・m
General tolerances: ±1.00[±0.039]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

LMF Series 75–1000W Enclosed Switching Power Supply (With PFC Function, Single Output)

Features:

- Input voltage: 85-305VAC/120-430VDC
- Accepts AC or DC input (dual-use of same terminal)
- Operating temperature: -30℃ to +70℃
- Built-in active PFC function
- Isolation voltage 4000VAC
- Remote ON-OFF control
- Output short circuit, over-current, over-voltage, over-temperature protection (built-in constant current limiting circuit)
- Meets IEC/EN/UL62368, IEC/EN60335, IEC/EN61558, GB4943 standards
- EMI performance meets CISPR32/EN55032 CLASS B

LMF75–20Bxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF75-20B05	75W	85 - 264VAC/ 120 - 370VDC	5V/15A	82
LMF75-20B12	75.6W		12V/6.3A	85
LMF75-20B15	75W		15V/5A	86
LMF75-20B24	76.8W		24V/3.2A	87
LMF75-20B48	76.8W		48V/1.6A	89

LMF100–23Bxx

RoHS CB Report

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF100-23B12	102W	85-305VAC/ 120-430VDC	12V/8.5A	85
LMF100-23B15	100.5W		15V/6.7A	86
LMF100-23B24	100.8W		24V/4.2A	86
LMF100-23B48	100.8W		48V/2.1A	87

LMF150–23Bxx

RoHS CB Report

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF150-23B12	150W	85-305VAC/ 120-430VDC	12V/12.5A	85.5
LMF150-23B15	150W		15V/10A	86
LMF150-23B24	151.2W		24V/6.3A	87
LMF150-23B48	153.6W		48V/3.2A	88

LMF200–23Bxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF200-23B12	200.4W	85-305VAC/ 120-430VDC	12V/16.7A	88
LMF200-23B15	201W		15V/13.4A	88
LMF200-23B24	201.6W		24V/8.4A	90
LMF200-23B48	201.6W		48V/4.2A	89

LMF320–23Bxx

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF320-23B05	300W	85-305VAC/ 120-430VDC	5V/60A	84
LMF320-23B12	320.4W		12V/26.7A	86.5
LMF320-23B15	321W		15V/21.4A	89
LMF320-23B24	321.6W		24V/13.4A	88.5
LMF320-23B48	321.6W		48V/6.7A	89

LMF600–20Bxx

RoHS

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF600-20B05	500W	85-264VAC/ 120-373VDC	5V/100A	86
LMF600-20B12	600W		12V/50A	92
LMF600-20B15	600W		15V/40A	92
LMF600-20B24	600W		24V/25A	94
LMF600-20B27	602.1W		27V/22.3A	94
LMF600-20B36	601.2W		36V/16.7A	94
LMF600-20B48	600W		48V/12.5A	94

LMF1000–20Bxx

RoHS

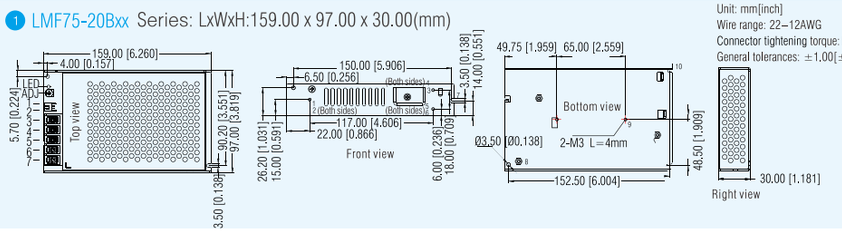
Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LMF1000-20B12	970W	90-264VAC/ 120-390VDC	12V/80A	92
LMF1000-20B24	1018W		24V/42A	94
LMF1000-20B48	1018W		48V/21A	94

Note: All models have two variants.
① Terminal with protective cover series: with the suffix "-C";
② Products with conformal coating series: with the suffix "-Q".

Package Dimension

① LMF75-20Bxx Series: LxWxH:159.00 x 97.00 x 30.00(mm)



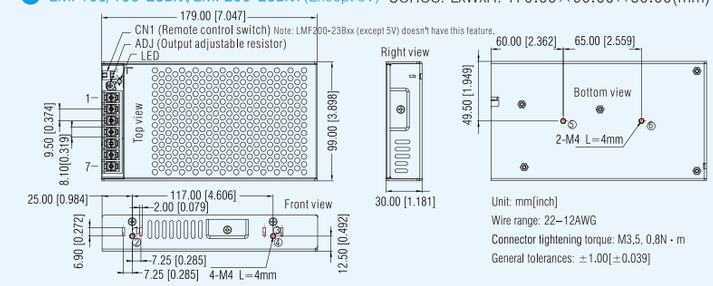
Unit: mm[inch]
Wire range: 22–12AWG
Connector tightening torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	RC+
2	RC-
3	+Vo
4	-Vo
5	⏚
6	AC(N)
7	AC(L)

Package Dimension

② LMF100/150-23Bxx/LMF200-23Bxx (Except 5V) Series: LxWxH: 179.00×99.00×30.00(mm)

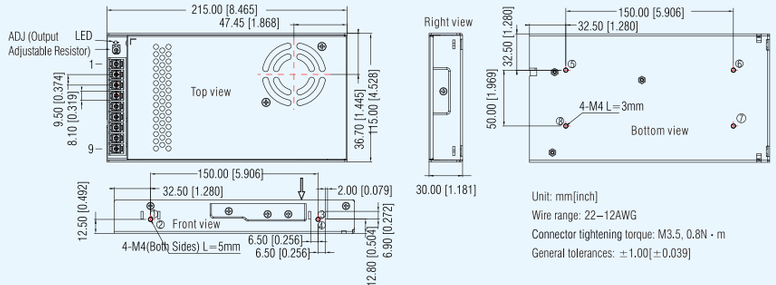


Unit: mm[inch]
Wire range: 22–12AWG
Connector tightening torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	-Vo
4	-Vo
5	⏚
6	AC(N)
7	AC(L)

③ LMF200-23B05/LMF320-23Bxx Series: LxWxH: 215.00×115.00×30.00(mm)

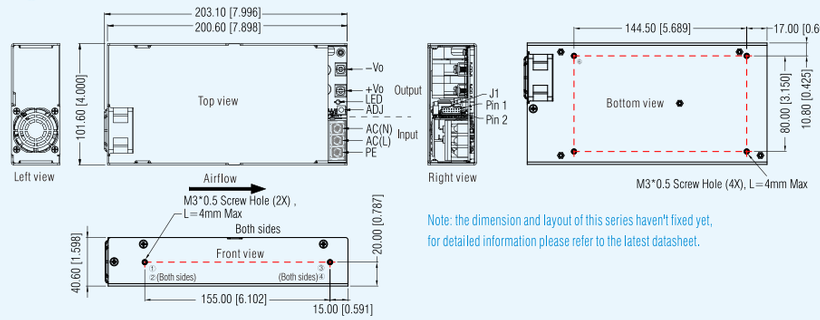


Unit: mm[inch]
Wire range: 22–12AWG
Connector tightening torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	+Vo
4	-Vo
5	-Vo
6	-Vo
7	⏚
8	AC(N)
9	AC(L)

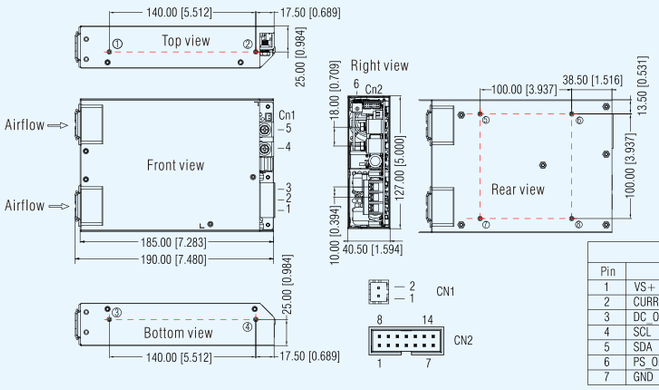
④ LMF600-20Bxx Series: LxWxH: 203.1×101.6×40.6(mm)



Note: the dimension and layout of this series haven't fixed yet, for detailed information please refer to the latest datasheet.

Unit: mm[inch]
Wire diameter of input terminal: 22–14AWG
Input wiring lock attached torque: M4, 1.2N・m
Wire diameter of input terminal: 22–12AWG
Input wiring lock attached torque: M3.5, 0.8N・m
General tolerances: ±1.00[±0.039]
①-⑧ any position must be connected to PE

⑤ LMF1000-20Bxx Series: LxWxH: 190.00×127.00×40.50(mm)



Unit: mm[inch]
Wire range: 22–12AWG
Connector tightening torque: M5, 2.3N・m
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo
5	+Vo
6	ADJ Output adjustable resistor

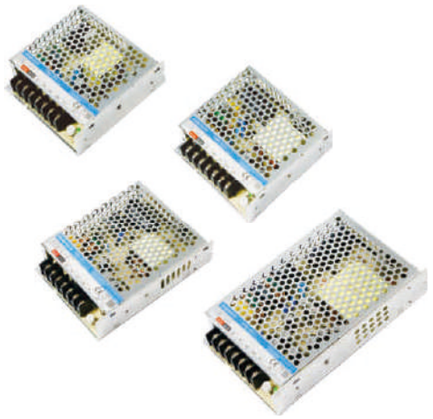
Pin-Out		Client Connector
Pin	Function	
1	-S	Housing: XHS2.5-2Y (Kang Dao) or equivalent Contact: XH2.5-TE (Kang Dao) or equivalent
2	+S	

Pin-Out				Client Connector
Pin	Function	Pin	Function	
1	VS+	8	VS-	Housing: JST PHDR-14VS or equivalent Contact: JST SPHD-002T-P0.5 or equivalent
2	CURRENT SHARE	9	ADDRESS0	
3	DC_OK	10	ADDRESS1	
4	SCL	11	ADDRESS2	
5	SDA	12	RXD	
6	PS_ON	13	TXD	
7	GND	14	GND	

LM Series 35–100W Enclosed Switching Power Supply (Multiple Outputs)

Features:

- Input voltage: 85-264VAC/120-373VDC
- Operating temperature: -30℃ to +70℃
- High efficiency, high reliability, long lifetime
- Output short circuit, over-current, over-voltage protection
- Isolation voltage 3000VAC
- Meets IEC/EN/UL62368, EN60335, GB4943 standards
- EMI performance meets CISPR32/EN55032 CLASS B
- Withstand 5G vibration test
- Operating altitude up to 5000m



LM35–10Cxx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	(Vo3/Io3)	Efficiency(%) (typ)
LM35-10C051212-10	33W	85-264VAC/ 120-373VDC	+5V/3.0A	+12V/1.0A	-12V/0.5A	81
LM35-10C051515-10	35W		+5V/2.5A	+15V/1.0A	-15V/0.5A	81
LM35-10C052412-05	36.5W		+5V/2.5A	+24V/0.5A	+12V/1.0A	81

LM50–10Cxx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	(Vo3/Io3)	Efficiency(%) (typ)
LM50-10C051212-20	50W	85-264VAC/ 120-373VDC	+5V/4.0A	+12V/2.0A	-12V/0.5A	81
LM50-10C051515-15	50W		+5V/4.0A	+15V/1.5A	-15V/0.5A	83
LM50-10C052412-10	51W		+5V/3.0A	+24V/1.0A	+12V/1.0A	85

LM75–10Cxx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	(Vo3/Io3)	Efficiency(%) (typ)
LM75-10C051212-28	69.6W	90-264VAC/ 120-373VDC	+5V/6.0A	+12V/2.8A	-12V/0.5A	82
LM75-10C051515-23	72W		+5V/6.0A	+15V/2.3A	-15V/0.5A	82
LM75-10C052412-15	73W		+5V/5.0A	+24V/1.5A	+12V/1.0A	84

LM100–10Cxx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	(Vo3/Io3)	Efficiency(%) (typ)
LM100-10C051212-35	94W	90-264VAC/ 120-373VDC	+5V/8.0A	+12V/3.5A	-12V/1.0A	84
LM100-10C051515-30	95W		+5V/7.0A	+15V/3.0A	-15V/1.0A	85
LM100-10C052412-20	96W		+5V/6.0A	+24V/2.0A	+12V/1.5A	85

Note: All models have a variant. Poducts with conformal coating series: with the suffix "-Q".

LM35–10Dxx

cULus CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	Efficiency(%) (typ)
LM35-10D0512-10	32W	85-264VAC/ 120-373VDC	+5V/4.0A	+12V/1.0A	81
LM35-10D0524-10	35W		+5V/2.2A	+24V/1.0A	83

LM50–10Axx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	Efficiency(%) (typ)
LM50-10A12	50.4W	85-264VAC/ 120-373VDC	+12V/2.1A	-12V/2.1A	83

LM50–10Dxx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	Efficiency(%) (typ)
LM50-10D0512-20	54W	85-264VAC/ 120-373VDC	+5V/6.0A	+12V/2.0A	83
LM50-10D0524-14	53.6W		+5V/4.0A	+24V/1.4A	84

LM75–10Dxx

cULus CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	Efficiency(%) (typ)
LM75-10D0512-30	71W	90-264VAC/ 120-373VDC	+5V/7.0A	+12V/3.0A	82
LM75-10D0524-20	73W		+5V/5.0A	+24V/2.0A	84

LM100–10Dxx

CE RoHS

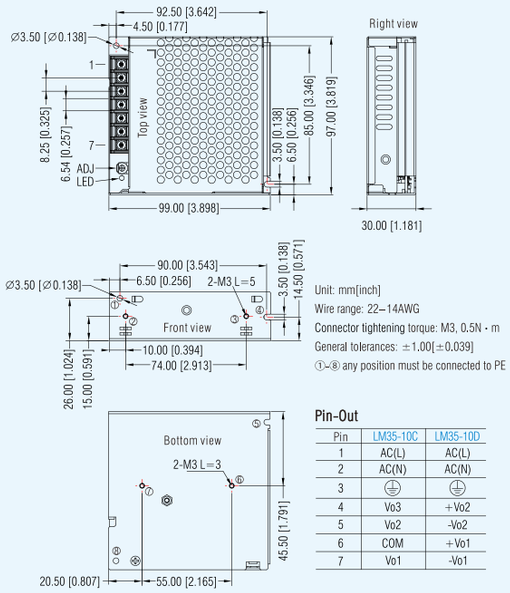
Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	(Vo2/Io2)	Efficiency(%) (typ)
LM100-10D0524-30	97W	90-264VAC/ 120-373VDC	+5V/5.0A	+24V/3.0A	85
LM100-10D1224-20	96W		+12V/4.0A	+24V/2.0A	87

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

① LM35-10C/Dxx Series: LxWxH: 99.00 × 97.00 × 30.00(mm)

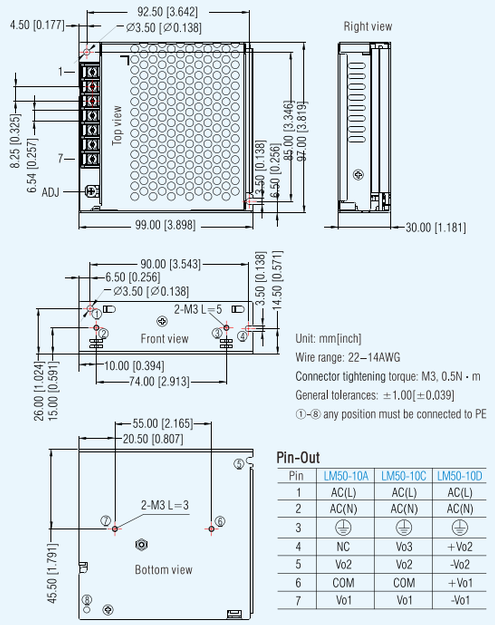


Unit: mm[inch]
Wire range: 22–14AWG
Connector tightening torque: M3, 0.5N・m
General tolerances: ±1.00[±0.039]
①-⑧ any position must be connected to PE

Pin-Out

Pin	LM35-10C	LM35-10D
1	AC(L)	AC(L)
2	AC(N)	AC(N)
3	⏚	⏚
4	Vo3	+Vo2
5	Vo2	-Vo2
6	COM	+Vo1
7	Vo1	-Vo1

② LM50-10A/C/Dxx Series: LxWxH: 99.00 × 97.00 × 30.00(mm)

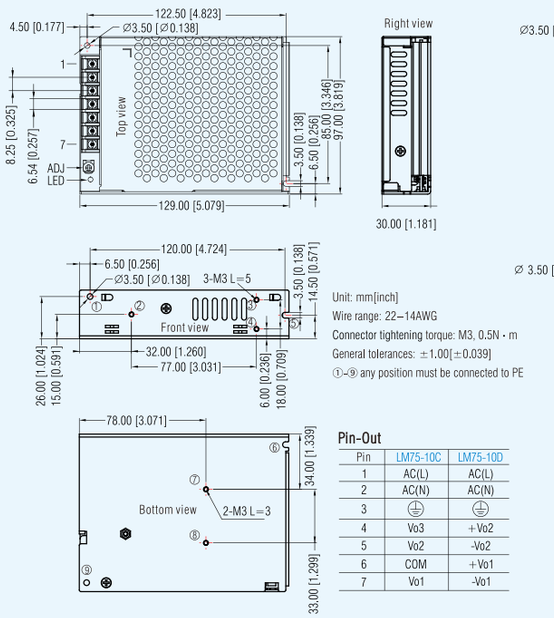


Unit: mm[inch]
Wire range: 22–14AWG
Connector tightening torque: M3, 0.5N・m
General tolerances: ±1.00[±0.039]
①-⑧ any position must be connected to PE

Pin-Out

Pin	LM50-10A	LM50-10C	LM50-10D
1	AC(L)	AC(L)	AC(L)
2	AC(N)	AC(N)	AC(N)
3	⏚	⏚	⏚
4	NC	Vo3	+Vo2
5	Vo2	Vo2	-Vo2
6	COM	COM	+Vo1
7	Vo1	Vo1	-Vo1

③ LM75-10C/Dxx Series: LxWxH: 129.00×97.00×30.00(mm)

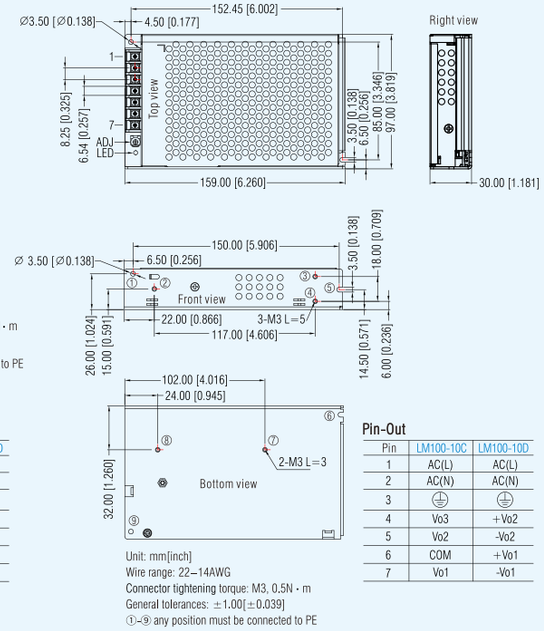


Unit: mm[inch]
Wire range: 22–14AWG
Connector tightening torque: M3, 0.5N・m
General tolerances: ±1.00[±0.039]
①-⑨ any position must be connected to PE

Pin-Out

Pin	LM75-10C	LM75-10D
1	AC(L)	AC(L)
2	AC(N)	AC(N)
3	⏚	⏚
4	Vo3	+Vo2
5	Vo2	-Vo2
6	COM	+Vo1
7	Vo1	-Vo1

④ LM100-10C/Dxx Series: LxWxH: 159.00×97.00×30.00(mm)



Unit: mm[inch]
Wire range: 22–14AWG
Connector tightening torque: M3, 0.5N・m
General tolerances: ±1.00[±0.039]
①-⑨ any position must be connected to PE

Pin-Out

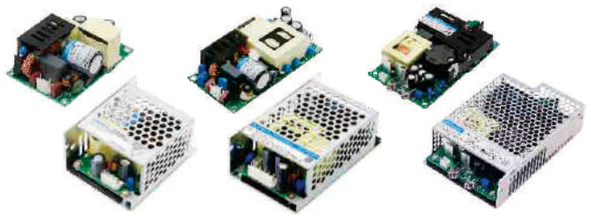
Pin	LM100-10C	LM100-10D
1	AC(L)	AC(L)
2	AC(N)	AC(N)
3	⏚	⏚
4	Vo3	+Vo2
5	Vo2	-Vo2
6	COM	+Vo1
7	Vo1	-Vo1

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

AC/DC Enclosed Switching Power Supply

LOF Series 120-350W High Power Density Open Frame / Enclosed Switching Power Supply (With PFC Function)

Features:



- Input voltage: 85-264VAC/120-370VDC
- High power density, compact size
- Built-in active PFC function
- Isolation voltage 4000VAC
- Operating altitude up to 5000m
- Extremely low leakage current < 0.1mA
- Stand-by power consumption < 0.5W
- The base plate with conformal coating
- Output short circuit, over-current, over-voltage, over-temperature protection
- Suitable for BF application
- Installing in system of safety class I (with PE) / II (without PE) is available
- Meets IEC/EN/UL62368-1, IEC/EN60335-1, IEC/EN61558-1, GB4943-1, IEC/EN/ES60601-1 standards

LOF120-20Bxx(-C) RoHS CB Report

Product Program

Model number	Input voltage range	Cooling mode	Rated power	Output voltage/ current(Vo1/Io1)	Efficiency(%) (typ)
LOF120-20B12	85-264VAC/ 120-370VDC	Air cooling	114W	12V/9.5A	94
LOF120-20B15		Air cooling	114W	15V/7.6A	94
LOF120-20B24		Air cooling	120W	24V/5A	95
LOF120-20B27		Air cooling	119.9W	27V/4.44A	95
LOF120-20B36		Air cooling	118.8W	36V/3.3A	93
LOF120-20B48		Air cooling	120W	48V/2.5A	94.5
LOF120-20B54		Air cooling	120W	54V/2.5A	94

LOF350-20Bxx(-C) RoHS CB Report

Product Program

Model number	Input voltage range	Cooling mode	Rated power	Output voltage/ current(Vo1/Io1)	Efficiency(%) (typ)
LOF350-20B12	90-264VAC/ 127-373VDC	Air cooling	180W	12V/15A	92
		20.5CFM	300W	12V/25A	92
LOF350-20B15	90-264VAC/ 127-373VDC	Air cooling	180W	15V/12A	92
		20.5CFM	325W	15V/21.67A	92
LOF350-20B24	90-264VAC/ 127-373VDC	Air cooling	199.9W	24V/8.33A	93
		20.5CFM	350.4W	24V/14.6A	93
LOF350-20B27	90-264VAC/ 127-373VDC	Air cooling	199.8W	27V/7.4A	93
		20.5CFM	351W	27V/13A	93
LOF350-20B36	90-264VAC/ 127-373VDC	Air cooling	200.1W	36V/5.56A	93
		20.5CFM	350.3W	36V/9.73A	93
LOF350-20B48	90-264VAC/ 127-373VDC	Air cooling	200.1W	48V/4.17A	94
		20.5CFM	350.4W	48V/7.3A	94
LOF350-20B54	90-264VAC/ 127-373VDC	Air cooling	199.8W	54V/3.7A	94
		20.5CFM	351W	54V/6.5A	94

LOF225-20Bxx(-C) RoHS CB Report

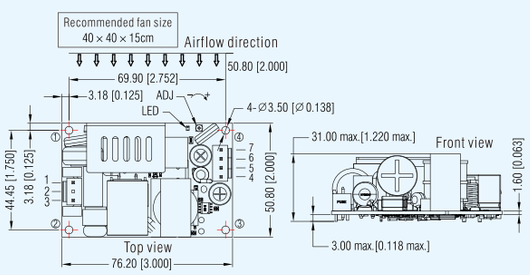
Product Program

Model number	Input voltage range	Cooling mode	Rated power	Output voltage/ current(Vo1/Io1)	Efficiency(%) (typ)
LOF225-20B12	85-264VAC/ 120-370VDC	Air cooling	140W	12V/11.67A	93
		13CFM	225W	12V/18.75A	93
LOF225-20B15	85-264VAC/ 120-370VDC	Air cooling	140W	15V/9.33A	93
		13CFM	225W	15V/15A	93
LOF225-20B24	85-264VAC/ 120-370VDC	Air cooling	140W	24V/5.83A	94
		13CFM	225W	24V/9.4A	94
LOF225-20B27	85-264VAC/ 120-370VDC	Air cooling	130W	27V/4.81A	94
		13CFM	225W	27V/8.35A	94
LOF225-20B36	85-264VAC/ 120-370VDC	Air cooling	140W	36V/3.88A	94
		13CFM	225W	36V/6.25A	94
LOF225-20B48	85-264VAC/ 120-370VDC	Air cooling	140W	48V/2.91A	94
		13CFM	225W	48V/4.7A	94
LOF225-20B54	85-264VAC/ 120-370VDC	Air cooling	140W	54V/2.59A	94
		13CFM	225W	54V/4.17A	94

Note:Metal enclosure series: series with the suffix "-C".

Package Dimension

1 LOF120-20Bxx Series: LxWxH: 76.20×50.80×31.00(mm)

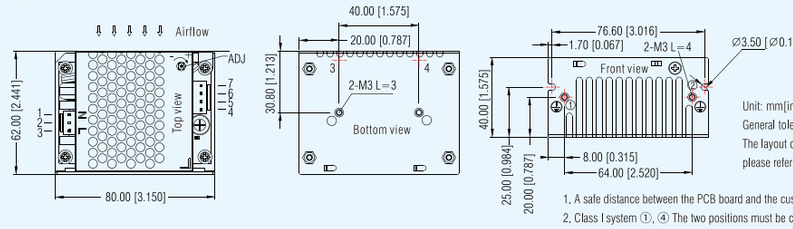


Pin-Out			
Pin	Function	Product Connector	Client Connector
1	AC(N)	JST B3P-VH or equivalent	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
2	NC		
3	AC(L)		
4、5	-Vo	JST B4P-VH or equivalent	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
6、7	+Vo		

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

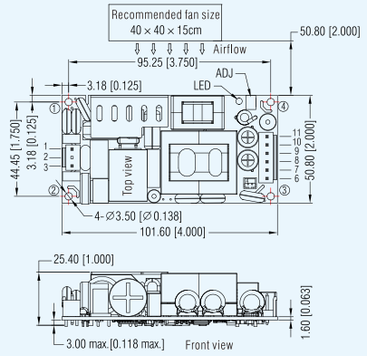
2 LOF120-20Bxx-C Series: LxWxH: 80.00×62.00×40.00(mm) The pin function of this series is the same as LOF120-20Bxx.



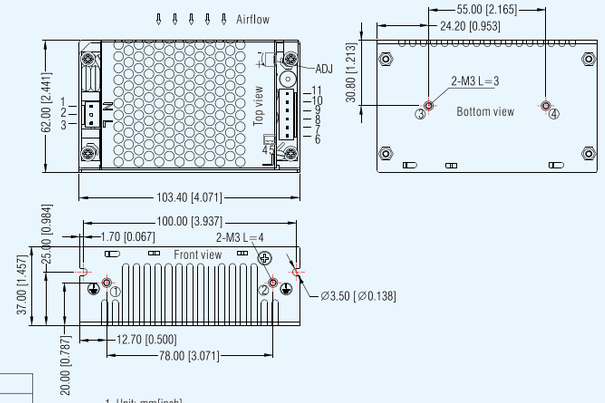
Unit: mm[inch]
General tolerances: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

1. A safe distance between the PCB board and the customer device must be reserved, 10mm is recommended
2. Class I system ①, ④ The two positions must be connected to the earth (⏚)
3. Class II system ①, ④ The two positions must be shorted

3 LOF225-20Bxx Series: LxWxH: 101.60×50.80×25.40(mm)



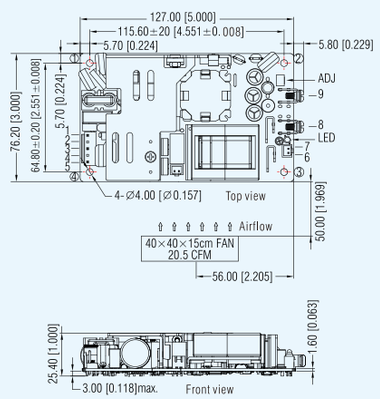
4 LOF225-20Bxx-C Series: LxWxH: 103.40×62.00×37.00(mm)



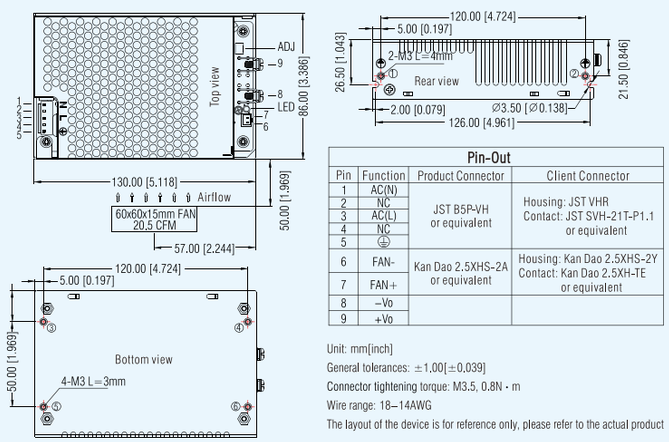
Pin-Out			
Pin	Function	Product Connector	Client Connector
1	AC(N)/DC−	JST B3P-VH or equivalent	Housing: JST VHR Contact: JST SVH-21T-P1.1or equivalent
2	NC		
3	AC(L)/DC+		
4	Fan-	JST B2B-PH-K-S or equivalent	Housing: JST PHR-2 Contact: JST SPH-002T-P0.56 or equivalent
5	Fan+		
6、7、8	−Vo	JST B6P-VH or equivalent	Housing: JST VHR Contact: JST SVH-21T-P1.1or equivalent
9、10、11	+Vo		

1. Unit: mm[inch]
2. General tolerances: ±1.00[±0.039]
3. Please do not use fan power to power other devices
4. The layout of the device is for reference only, please refer to the actual product
5. A safe distance between the PCB board and the customer device must be reserved, 10mm is recommended
6. Class I system ①, ③ The two positions must be connected to the earth (⏚)
7. Class II system ①, ③ The two positions must be shorted

5 LOF350-20Bxx Series: LxWxH: 127.00×76.20×25.40(mm)



6 LOF350-20Bxx-C Series: LxWxH: 130.00×86.00×35.00(mm)



Pin-Out			
Pin	Function	Product Connector	Client Connector
1	AC(N)	JST B5P-VH or equivalent	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
2	NC		
3	AC(L)		
4	NC		
5	⏚		
6	FAN-	Kan Dao 2.5XHS-2A or equivalent	Housing: Kan Dao 2.5XHS-2Y Contact: Kan Dao 2.5XH-TE or equivalent
7	FAN+		
8	−Vo		
9	+Vo		

Unit: mm[inch]
General tolerances: ±1.00[±0.039]
Connector tightening torque: M3.5, 0.8N・m
Wire range: 18−14AWG
The layout of the device is for reference only, please refer to the actual product

1. A safe distance between the PCB board and the customer device must be reserved, 10mm is recommended
2. Class I system ①, ②, ④ The two positions must be connected to the earth (⏚)
3. Class II system ①,②, ④ The two positions must be shorted

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

LOF Series 450-550W High Power Density Open Frame (With PFC Function) / Enclosed Switching Power Supply

Features:

- Input voltage: 85-264VAC/120-370VDC
- High power density, compact size
- Built-in active PFC function
- Isolation voltage 4000VAC
- Operating altitude up to 5000m
- Extremely low leakage current < 0.1mA
- Stand-by power consumption < 0.5W
- The base plate with conformal coating
- Output short circuit, over-current, over-voltage, over-temperature protection
- Suitable for BF application
- Installing in system of safety class I (with PE) / II (without PE) is available
- Meets IEC/EN/UL62368-1, IEC/EN60335-1, IEC/EN61558-1, GB4943-1, IEC/EN/ES60601-1 standards

LOF450-20Bxx(-C/-CF)

2xMOPP CB Report (Pending)

Product Program

Model number	Input voltage range	Cooling mode	Rated power	Output voltage/ current(Vo1/Io1)	Efficiency(%) (typ)
LOF450-20B12	90-264VAC/ 127-373VDC	Air cooling	250W	12V/20.8A	91
		25CFM	400W	12V/33.3A	91
LOF450-20B15	90-264VAC/ 127-373VDC	Air cooling	250W	15V/16.7A	92
		25CFM	400W	15V/26.7A	92
LOF450-20B24	90-264VAC/ 127-373VDC	Air cooling	250W	24V/10.5A	93
		25CFM	450W	24V/18.75A	93
LOF450-20B27	90-264VAC/ 127-373VDC	Air cooling	250W	27V/9.3A	93.5
		25CFM	450W	27V/16.7A	93.5
LOF450-20B36	90-264VAC/ 127-373VDC	Air cooling	250W	36V/6.95A	93
		25CFM	450W	36V/12.5A	93
LOF450-20B48	90-264VAC/ 127-373VDC	Air cooling	250W	48V/5.3A	94
		25CFM	450W	48V/9.4A	94

LOF550-20Bxx(-C/-CF)

2xMOPP CB Report (Pending)

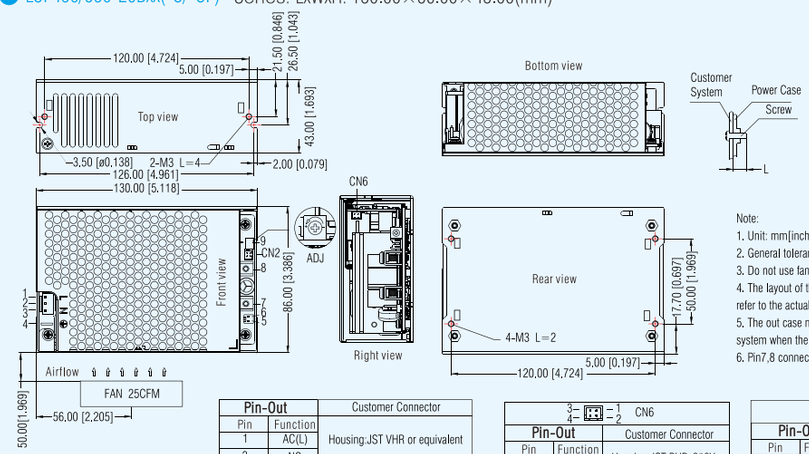
Product Program

Model number	Input voltage range	Cooling mode	Rated power	Output voltage/ current(Vo1/Io1)	Efficiency(%) (typ)
LOF550-20B12	90-264VAC/ 127-373VDC	Air cooling	320W	12V/26.7A	91
		25CFM	500W	12V/41.6A	91
LOF550-20B15	90-264VAC/ 127-373VDC	Air cooling	320W	15V/21.3A	92
		25CFM	500W	15V/33.3A	92
LOF550-20B24	90-264VAC/ 127-373VDC	Air cooling	320W	24V/13.4A	93
		25CFM	550W	24V/22.9A	93
LOF550-20B27	90-264VAC/ 127-373VDC	Air cooling	320W	27V/11.9A	93.5
		25CFM	550W	27V/20.4A	93.5
LOF550-20B36	90-264VAC/ 127-373VDC	Air cooling	320W	36V/8.9A	94
		25CFM	550W	36V/15.3A	94
LOF550-20B48	90-264VAC/ 127-373VDC	Air cooling	320W	48V/6.7A	94
		25CFM	550W	48V/11.46A	94

Note: Metal enclosure series: series with the suffix "-C".

Package Dimension

1 LOF450/550-20Bxx(-C/-CF) Series: LxWxH: 130.00×86.00×43.00(mm)



Position	Screw Spec.	L(max)	Torque(max)
① - ②	M3	4mm	0.4N·}m
③ - ⑥	M3	2mm	0.4N·}m

Note:
1. Unit: mm[inch]
2. General tolerances: ±1.00[±0.039]
3. Do not use fan power to power other devices
4. The layout of the device is for reference only, please refer to the actual product
5. The out case needs to be connected to the earth of system when the terminal
6. Pin7,8 connector tightening torque: M4, 1.2N·m(max)

Pin-Out		Customer Connector
Pin	Function	
1	AC(L)	Housing:JST VHR or equivalent Contact:JST SVH-21T-P1.1 or equivalent
2	NC	
3	AC(N)	
4	⏚	
5	FAN+	Housing:TKP 2502 or equivalent Contact:TKP 8811 or equivalent
6	FAN-	
7	+Vo	
8	-Vo	
9	ADJ Output adjustable resistor	

3– –1, 4– –2 CN6

Pin-Out		Customer Connector
Pin	Function	
1	+5V	Housing:JST PHD-2*2Y or equivalent Contact:JST PHD-TE or equivalent
2	GND	
3	PS-ON	
4	GND	

2– –1, 4– –3 CN2

Pin-Out		Customer Connector
Pin	Function	
1	RS+	Housing:JST PHD-2*2Y or equivalent Contact:JST PHD-TE or equivalent
2	RS-	
3	GND	
4	PG	

Note: the dimension and layout of this series haven't fixed yet, for detailed information please refer to the latest datasheet.

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

KNX Series 20W AC/DC Bus Power Supply

Features:

- Input voltage: 180-264VAC/254-370VDC
- Operating temperature: -30℃ to +70℃
- Low standby power consumption, high efficiency
- Isolation voltage 4000VAC
- Output short circuit, over-current, over-voltage protection
- EN62368 safety approved, safety according to EN61558, EN50491
- Bus reset function
- LED indicator for working status, over-load and reset
- Internal integrated choke
- Compact dimensions, Din-rail design, din rail TS-35/7.5 or TS-35/15 mountable
- Over-voltage class Ⅲ
- Safety extra low voltage (SELV)
- 10-year life design

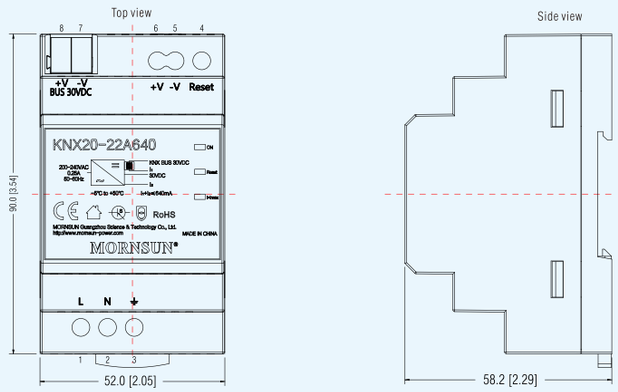
KNX20-22A640

Product Program

Model number	Power	Input voltage range	Output voltage/ current	Efficiency(%) (typ)
KNX20-22A640	19.2W	180-264VAC	30V/640mA	86

Package Dimension

1 KNX20-22A640 Series: LxWxH: 52.00×90.00×58.20(mm)



Pin-Out			
Port	Function	Port	Function
1	L	4	Reset
2	N	5	−Vo 2
3	⏚	6	+Vo 2
Led1	ON(G)	7	KNX Bus −Vo 1
Led2	Reset(R)	8	KNX Bus +Vo 1
Led3	I>Imax (R)		

Unit: mm[inch]
General tolerances: ±0.5[±0.02]

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LI Series 30-100W Plastic DIN-Rail Power Supply LI-PR2 Series

Features:

- Wide input voltage range: 85-264VAC/120-370VDC
- Accepts AC or DC input (dual-use of same terminal)
- Operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC (input-output)
- Over-voltage class III (designed to meet EN61558)
- Low standby power consumption, high efficiency, low ripple & noise
- Output short circuit, over-current, over-voltage protection
- UL/EN/IEC62368 safety approved
- DIN rail TS35X7.5/TS35X15 mountable

LI30-20BxxPR2

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LI30-20B05PR2	15W	85-264VAC/ 120-370VDC	5V/3A	82
LI30-20B12PR2	24W		12V/2A	88
LI30-20B15PR2	30W		15V/2A	89
LI30-20B24PR2	36W		24V/1.5A	89
LI30-20B48PR2	36W		48V/0.75A	90

LI60-20BxxPR2

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LI60-20B05PR2	32.5W	85-264VAC/ 120-370VDC	5V/6.5A	84
LI60-20B12PR2	54W		12V/4.5A	88
LI60-20B15PR2	60W		15V/4.0A	89
LI60-20B24PR2	60W		24V/2.5A	90
LI60-20B48PR2	60W		48V/1.25A	91

LI100-20BxxPR2

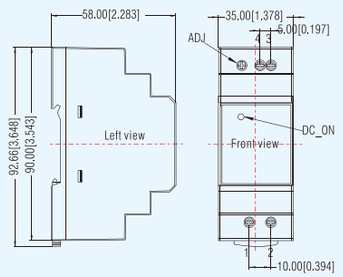
cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LI100-20B12PR2	90W	85-264VAC/ 120-370VDC	12V/7.5A	88
LI100-20B15PR2	97.5W		15V/6.5A	89
LI100-20B24PR2	100.8W		24V/4.2A	90
LI100-20B48PR2	100.8W		48V/2.1A	90

Package Dimension

1 LI30-20BxxPR2 Series: LxWxH: 35.00x92.66x58.00(mm)

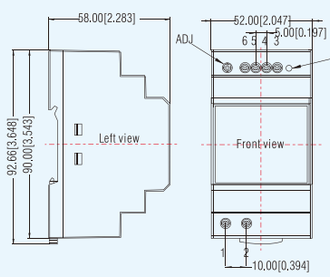


Pin-Out

Pin	LI30-20B
1	AC(L)
2	AC(N)
3	-Vo
4	+Vo

Unit: mm[inch]
ADJ: adjustable resistance to change output voltage
Wire diameter: 24–12AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35
General tolerances: ±1.00[±0.039]

2 LI60-20BxxPR2 Series: LxWxH: 52.00x92.66x58.00(mm)

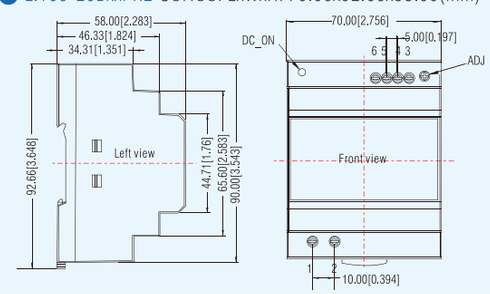


Pin-Out

Pin	LI60-20B
1	AC(L)
2	AC(N)
3	+Vo
4	+Vo
5	-Vo
6	-Vo

Unit: mm[inch]
ADJ: adjustable resistance to change output voltage
Wire diameter: 24–12AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35
General tolerances: ±1.00[±0.039]

3 LI100-20BxxPR2 Series: LxWxH: 70.00x92.66x58.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	+Vo
4	+Vo
5	-Vo
6	-Vo

Unit: mm[inch]
ADJ: adjustable resistance to change output voltage
Wire diameter: 24–12AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35
General tolerances: ±1.00[±0.039]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

LI Series 75-120W Single-phase Metal DIN-Rail Power Supply (Without PFC Function)

Features:

- Accepts AC or DC input (dual-use of same terminal)
- Efficiency up to 91%
- Low ripple & noise
- Output short circuit, over-current, over-voltage, over-temperature protection
- Compact size: suitable for small chassis and narrow space installation
- Operating altitude up to 5000m
- Meets IEC61000-3-2 harmonic requirements, suitable for lighting circuits

LI75-20BxxR2

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LI75-20B12R2	75W	90-264VAC/ 120-373VDC	12V/6.3A	86
LI75-20B24R2	75W		24V/3.2A	89
LI75-20B48R2	75W		48V/1.6A	90

LI120-20BxxR2S

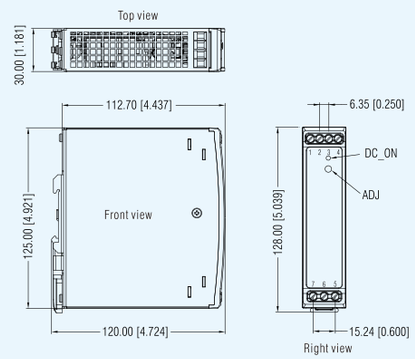
cULus CE RoHS

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LI120-20B12R2S	120W	90-264VAC/ 127-373VDC	12V/10A	85
LI120-20B24R2S	120W		24V/5A	88
LI120-20B48R2S	120W		48V/2.5A	89

Package Dimension

1 LI75-20BxxR2 Series: LxWxH: 30.00x128.00x120.00(mm)

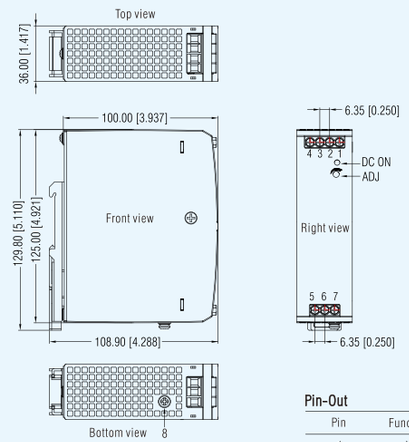


Unit: mm[inch]
ADJ: adjustable resistance to change output voltage
Wire diameter: 26–10AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35, rail needs to connect safety grounded
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	-Vo
4	-Vo
5	AC(L)
6	AC(N)
7	⏚

2 LI120-20BxxR2S Series: LxWxH: 36.00x125.00x100.00(mm)



Unit: mm[inch]
ADJ: adjustable resistance to change output voltage
Wire diameter: 26–10AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35, rail needs to connect safety grounded
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	-Vo
2	-Vo
3	+Vo
4	+Vo
5	AC(N)
6	AC(L)
7	⏚

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LIF Series 120-480W Single-phase DIN-Rail Power Supply (With PFC Function)

Features:

- Accepts AC or DC input (dual-use of same terminal)
- Efficiency up to 94%
- Built-in active PFC function
- LED indicator for power on (LIF series)
- Output short circuit, over-current, over-voltage, over-temperature protection
- DC OK function
- Meets IEC/EN/UL62368, IEC/EN60079 standards
- LIF120-10BxxR2-EX certified with ATEX, IECEx increased safety type explosion-proof certification

LIF120-10BxxR2

cULus CE RoHS

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LIF120-10B12R2	120W	85-264VAC/ 120-373VDC	12V/10A	92
LIF120-10B24R2	120W		24V/5A	93
LIF120-10B48R2	120W		48V/2.5A	93.5

LIF120-10BxxR2S-EX

cULus CE ATEX IECEx RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LIF120-10B12R2S-EX	120W	85-264VAC/ 120-373VDC	12V/10A	92
LIF120-10B24R2S-EX	120W		24V/5A	93
LIF120-10B48R2S-EX	120W		48V/2.5A	93.5

LIF240-10BxxR2

cULus CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LIF240-10B12R2	192W	85-264VAC/ 120-373VDC	12V/16A	92
LIF240-10B24R2	240W		24V/10A	94
LIF240-10B48R2	240W		48V/5A	94

LIF480-10BxxR2

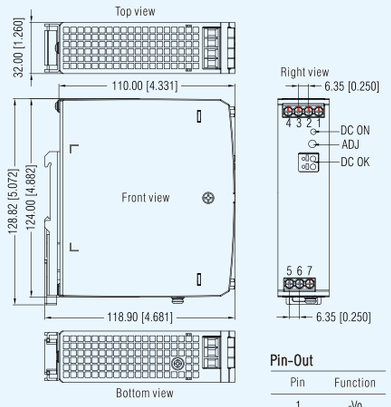
cULus CE RoHS

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LIF480-10B24R2	480W	85-264VAC/ 120-373VDC	24V/20A	94
LIF480-10B48R2	480W		48V/10A	94

Package Dimension

① LIF120-10BxxR2 Series: LxWxH: 32.00x124.00x110.00(mm)

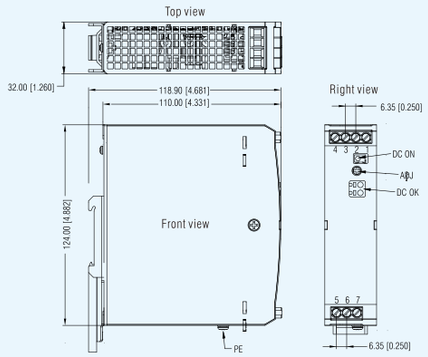


Unit: mm[inch]
DC ON: output status indicator LED
ADJ: output adjustable resistor
Wire diameter: 26–10AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35, rail needs to connect safety grounded
General tolerances: ±1.00[±0.039]

Pin-Out

Pin	Function
1	-Vo
2	-Vo
3	+Vo
4	+Vo
5	AC(N)
6	AC(L)
7	⏚

② LIF120-10BxxR2S-EX Series: LxWxH: 32.00x124.00x110.00(mm)



Unit: mm[inch]
DC ON: output status indicator LED
ADJ: output adjustable resistor
Wire diameter: 26–10AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35, rail needs to connect safety grounded
General tolerances: ±1.00[±0.039]

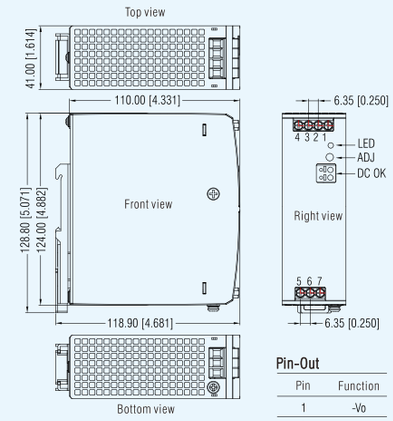
Pin-Out

Pin	Function
1	-Vo
2	-Vo
3	+Vo
4	+Vo
5	AC(N)
6	AC(L)
7	⏚

Note: the dimension and layout of this series haven't fixed yet, for detailed information please refer to the latest datasheet.

Package Dimension

③ LIF240-10BxxR2 Series: LxWxH: 41.00x124.00x110.00(mm)



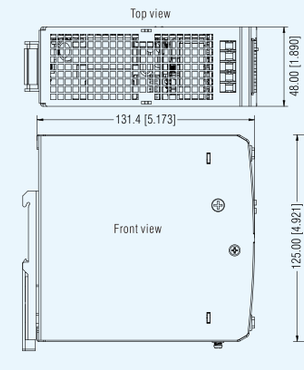
Unit: mm[inch]
ADJ: output adjustable resistor
Wire diameter: 26–10AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35, rail needs to connect safety grounded
General tolerances: ±1.00[±0.039]

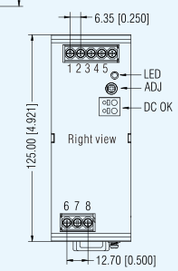
Pin-Out

Pin	Function
1	-Vo
2	-Vo
3	+Vo
4	+Vo
5	AC(N)
6	AC(L)
7	⏚

Note: the dimension and layout of this series haven't fixed yet, for detailed information please refer to the latest datasheet.

④ LIF480-10BxxR2 Series: LxWxH: 48.00x125.00x131.40(mm)





Pin-Out

Pin	Function
1	+Vo
2	+Vo
3	-Vo
4	-Vo
5	-Vo
6	AC(N)
7	AC(L)
8	PE

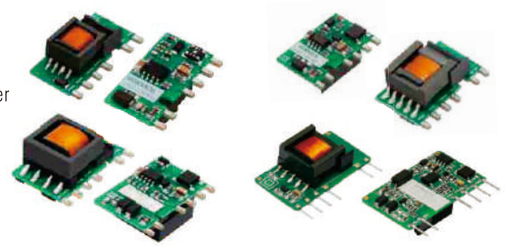
Unit: mm[inch]
ADJ: adjustable resistance to change output voltage
Wire diameter: 28–10AWG
Tightening torque: Max 0.4 N · m
Mounting rail: TS35, rail needs to connect safety grounded
General tolerances: ±1.00[±0.039]

Note: the dimension and layout of this series haven't fixed yet, for detailed information please refer to the latest datasheet.

LS Series 3~15W DIY Type AC/DC Converter

Features:

- Miniature layout dimension enables flexible installation, suitable for limited space applications
- Ultra-wide input voltage range: 85-305VAC/70-430VDC
- Accepts AC or DC input (dual-use of the same terminal)
- Operating temperature: -40℃ to +85℃
- Multi-application available, flexible layout
- Miniature size, high power density, low power consumption, green power
- Controllable lifespan and adjustable cost
- Low standby power consumption 0.1W
- Output short-circuit, over-current and over-voltage protection
- Stable output, low ripple & noise
- Meets IEC/EN61558, IEC/EN60335, IEC/UL/EN62368 standards



LS03-13BxxR3

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LS03-13B03R3	1.98W		3.3V/600mA	67
LS03-13B05R3	3W		5V/600mA	72
LS03-13B09R3	3W	85-305VAC/	9V/333mA	76
LS03-13B12R3	3W	70-430VDC	12V/250mA	77
LS03-13B15R3	3W		15V/200mA	78
LS03-13B24R3	3W		24V/125mA	80

LS05-13BxxR3(-F)

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LS05-13B03R3(-F)	3.3W		3.3V/1000mA	69
LS05-13B05R3(-F)	5W		5V/1000mA	76
LS05-13B09R3(-F)	5W	85-305VAC/	9V/560mA	77
LS05-13B12R3(-F)	5W	70-430VDC	12V/420mA	79
LS05-13B15R3(-F)	5W		15V/340mA	79
LS05-13B24R3(-F)	5W		24V/210mA	81

LS10-13BxxR3

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LS10-13B03R3	6.6W		3.3V/2000mA	73
LS10-13B05R3	10W		5V/2000mA	77
LS10-13B09R3	10W	85-305VAC/	9V/1100mA	80
LS10-13B12R3	10W	100-430VDC	12V/830mA	82
LS10-13B15R3	10W		15V/670mA	82
LS10-13B24R3	10W		24V/420mA	83

LS10-13BxxR3P

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LS10-13B03R3P	6.6W		3.3V/2000mA	70
LS10-13B05R3P	10W		5V/2000mA	77
LS10-13B09R3P	10W	85-305VAC/	9V/1100mA	80
LS10-13B12R3P	10W	90-430VDC	12V/830mA	83
LS10-13B15R3P	10W		15V/670mA	83
LS10-13B24R3P	10W		24V/420mA	84

LS15-13BxxSS(-F)

cULus CE RoHS CB Report

Product Program

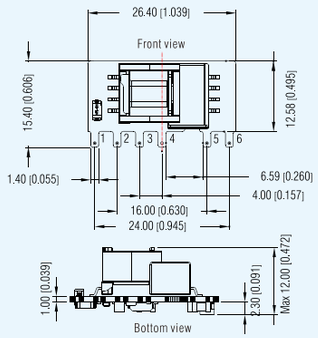
Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LS15-13B03SS(-F)	9.9W		3.3V/3000mA	75
LS15-13B05SS(-F)	14W		5V/2800mA	77
LS15-13B09SS(-F)	15W	85-305VAC/	9V/1670mA	82
LS15-13B12SS(-F)	15W	100-430VDC	12V/1250mA	82
LS15-13B15SS(-F)	15W		15V/1000mA	84
LS15-13B24SS(-F)	15W		24V/625mA	85

Note:
1. The nominal output voltage refers to the voltage applied to the load terminal after adding external circuits.
2. If the product is used in a severe vibration application, it needs to be glued and fixed.
3. The layout of 3.3V/5V/9V and 12V/15V/24V outputs are varied due to different modes of rectification.
4. An "-F" suffix designates horizontal package vs. standard vertical mounting. For example, the corresponding model with 90-degree bending pins of LS15-13BxxSS is LS15-13BxxSS-F.
5. This series has high precision output primary-side feedback type products. If needed please consult our sales.

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 LS03-13BxxR3 Series: LxWxH: 26.40 x 12.58 x 11.00 (mm)

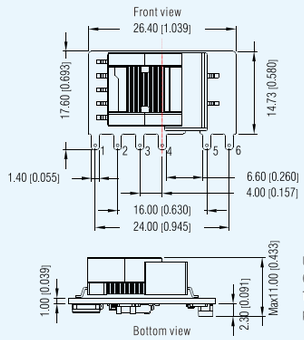


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	+V(CAP)
4	-V(CAP)
5	-Vo
6	+Vo

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

2 LS05-13BxxR3(-F) Series: LxWxH: 26.40 x 14.73 x 11.00(mm)

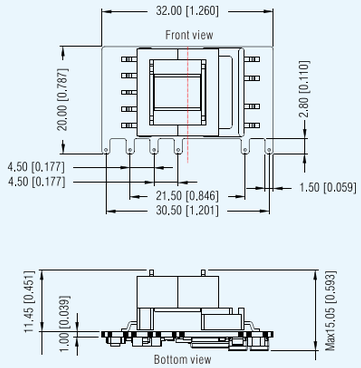


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	+V(cap)
4	-V(cap)
5	-Vo
6	+Vo

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

3 LS10-13BxxR3 Series: LxWxH: 32.00 x 17.20 x 15.05 (mm)

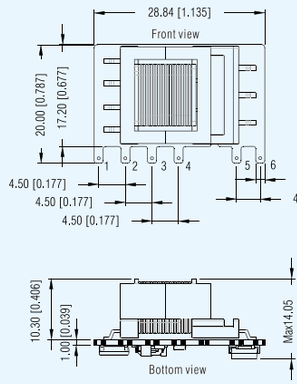


Pin-Out

Pin	Function
1	AC(N)
2	AC(L)
3	+V(CAP)
4	-V(CAP)
5	-Vo
6	+Vo

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

4 LS10-13BxxR3P Series: LxWxH: 28.84 x 17.20 x 14.05(mm)

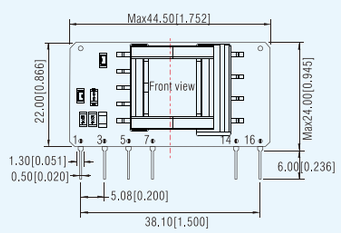


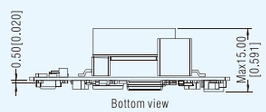
Pin-Out

Pin	Function
1	AC(N)
2	AC(L)
3	+V(CAP)
4	-V(CAP)
5	-Vo
6	+Vo

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

5 LS15-13BxxSS(-F) Series: LxWxH: 44.50 x 24.00 x 15.00(mm)





Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Pin-Out

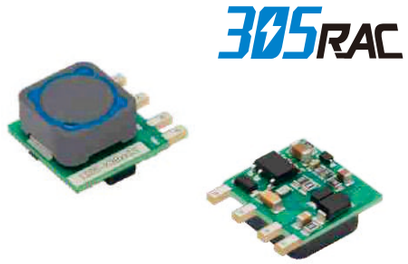
Pin	Function
1	AC(N)
3	AC(L)
5	+V(cap)
7	-V(cap)
14	-Vo
16	+Vo

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

LS Series 1-5W DIY Type AC/DC Converter (Non-isolated)

Features:

- Ultra-wide input voltage range: 85-305VAC/70-430VDC
- Operating temperature: -40℃ to +85℃
- Open frame, miniature size
- Efficiency up to 77%
- High reliability, green power
- Industrial grade product technology design
- Flexible choice of EMC peripheral circuits, simplify PCB design layout
- Output short-circuit, over-current protection
- Meets EN62368 standards



LS01-K3B05SS

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)
LS01-K3B05SS	1W	85-305VAC/ 70-430VDC	5V/200mA

LS03-K3B12SS

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)
LS03-K3B12SS	3W	85-305VAC/ 70-430VDC	12V/250mA

LS05-K3BxxSS

CE RoHS

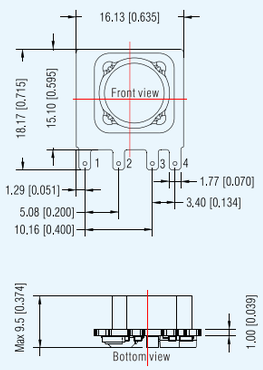
Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)
LS05-K3B12SS	4W	85-305VAC/ 70-430VDC	12V/330mA
LS05-K3B15SS	5W		15V/330mA
LS05-K3B18SS	5W		18V/280mA

Warning: Non-isolated power supply, there is no insulation protection between output and input dangerous voltage, beware of electric shock!

Package Dimension

1 LSxx-K3BxxSS Series: LxWxH: 16.13x9.50x18.17(mm)

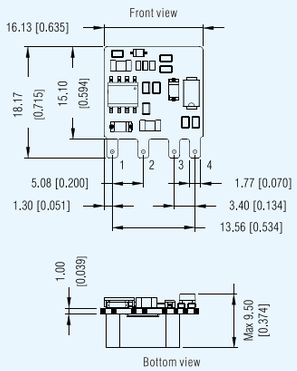


Pin-Out

Pin	Function
1	AC(L)
2	+V(cap)
3	AC(N)/-Vo
4	+Vo

Unit: mm[inch]
General tolerance: ±1.00[±0.040]

2 LS05-K3BxxSS Series: LxWxH: 16.13 x 15.10 x 9.50 (mm)



Pin-Out

Pin	Function
1	AC(L)
2	+V(CAP)
3	-Vo
4	+Vo

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

LSF Series 1W DIY Type DC/DC Converter (Single-wire)

Features:

- Ultra-low, ultra-wide input voltage range: 8(15)-380VDC
- Operating temperature: -25℃ to +85℃
- Ultra-low static current, low ripple & noise
- Compact size
- Output short circuit, over-current protection
- EN62368 safety approval

LSF01-K5BxxSS

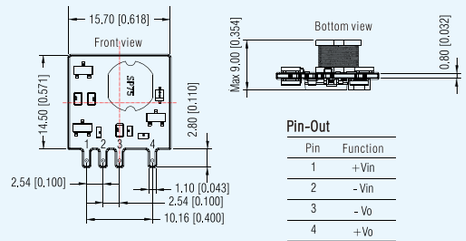
CE RoHS (Pending)

Product Program

Model number	Power	Output voltage/ current(Vo1/Io1)
LSF01-K5B05SS	0.625W	5.5V/114mA
LSF01-K5B12SS	1W	12.5V/83mA

Package Dimension

1 LSF01-K5BxxSS Series: LxWxH: 15.70x9.00x14.50(mm)



Pin-Out

Pin	Function
1	+Vin
2	- Vin
3	- Vo
4	+Vo

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

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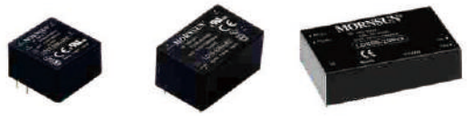
LD Series 3-60W Cost-effective AC/DC Converter (Campact Size)

Features:

- Ultra-wide input voltage range: 85-305VAC/100-430VDC
- Compact size
- Operating temperature: -40℃ to +85℃
- Isolation voltage 4000VAC
- Low standby power consumption < 0.1W
- Operating altitude up to 5000m
- Plastic case meets UL94V-0 flammability
- EMI performance meets CISPR32/EN55032 CLASS B, EN55014
- IEC/EN/UL62368/EN60335/EN61558 safety approval
- Meets IEC/EN60601-1/ANSI/AAMI ES60601-1 certification standards (2xMOPP)



LD03-23BxxR2

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD03-23B03R2	3W	85-305VAC/ 100-430VDC	3.3V/900mA	72
LD03-23B05R2	3W		5V/600mA	76
LD03-23B09R2	3W		9V/333mA	78
LD03-23B12R2	3W		12V/250mA	78
LD03-23B15R2	3W		15V/200mA	79
LD03-23B24R2	3W		24V/125mA	79

LD05-23BxxR2

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD05-23B03R2	5W	85-305VAC/ 100-430VDC	3.3V/1515mA	71.5
LD05-23B05R2	5W		5V/1000mA	77.5
LD05-23B09R2	5W		9V/555mA	80.5
LD05-23B12R2	5W		12V/416mA	80.5
LD05-23B15R2	5W		15V/333mA	81.5
LD05-23B24R2	5W		24V/208mA	81.5

LD10-23BxxR2

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD10-23B03R2	8.6W	85-305VAC/ 100-430VDC	3.3V/2600mA	74
LD10-23B05R2	10W		5V/2000mA	79
LD10-23B09R2	10W		9V/1100mA	81
LD10-23B12R2	10W		12V/830mA	84
LD10-23B15R2	10W		15V/660mA	84
LD10-23B24R2	10W		24V/410mA	85

LD15-23BxxR2

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD15-23B03R2	13.2W	85-305VAC/ 100-430VDC	3.3V/4000mA	82
LD15-23B05R2	15W		5V/3000mA	85
LD15-23B09R2	15W		9V/1670mA	84
LD15-23B12R2	15W		12V/1250mA	85
LD15-23B15R2	15W		15V/1000mA	85
LD15-23B24R2	15W		24V/625mA	86

LD20-23BxxR2

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD20-23B03R2	14.85W	85-305VAC/ 100-430VDC	3.3V/4500mA	81
LD20-23B05R2	20W		5V/4000mA	85
LD20-23B09R2	20W		9V/2200mA	85
LD20-23B12R2	20W		12V/1670mA	86
LD20-23B15R2	20W		15V/1330mA	87
LD20-23B24R2	20W		24V/830mA	87

LD30-23BxxR2

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD30-23B03R2	19.8W	85-305VAC/ 100-430VDC	3.3V/6000mA	85
LD30-23B05R2	30W		5V/6000mA	86
LD30-23B09R2	30.6W		9V/3400mA	88
LD30-23B12R2	30W		12V/2500mA	90
LD30-23B15R2	30W		15V/2000mA	90
LD30-23B24R2	31.2W		24V/1300mA	88
LD30-23B48R2	30.2W		48V/630mA	90

LDE45-20B

RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LDE45-20B05	40W	85-264VAC/ 100-370VDC	5V/8A	81
LDE45-20B12	45W		12V/3.8A	84
LDE45-20B15	45W		15V/3A	85
LDE45-20B24	45W		24V/1.9A	86
LDE45-20B48	45W		48V/0.94A	87

Note: Models with suffix " A2S" is chassis mounting and suffix with "A4S" is DIN-Rail mounting.

LDE60-20B

RoHS CB Report

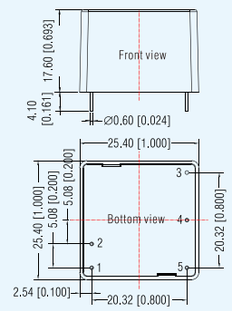
Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LDE60-20B05	50W	85-264VAC/ 100-370VDC	5V/10000mA	84
LDE60-20B12	60W		12V/5000mA	87
LDE60-20B15	60W		15V/4000mA	88
LDE60-20B24	60W		24V/2500mA	89
LDE60-20B48	60W		48V/1250mA	90

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 LD03-23BxxR2/LD05-23BxxR2 Series: LxWxH: 25.40 x 25.40 x 17.60(mm)

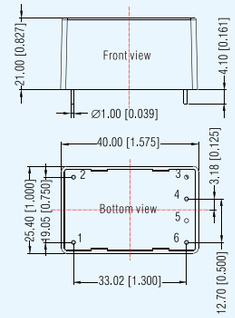


Pin-Out

Pin	Function
1	AC(N)
2	AC(L)
3	No pin
4	-Vo
5	+Vo

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

2 LD10-23BxxR2 Series: LxWxH: 40.00 x 25.40 x 21.00 (mm)

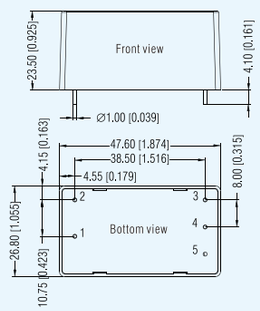


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	No Pin
4	+Vo
5	No Pin
6	-Vo

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

3 LD15-23BxxR2 Series: LxWxH: 47.60 x 26.80 x 23.50(mm)

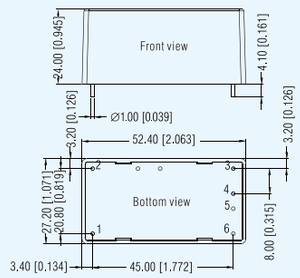


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	-Vo
4	+Vo
5	No Pin

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

4 LD20-23BxxR2 Series: LxWxH: 52.40 x 27.20 x 24.00(mm)

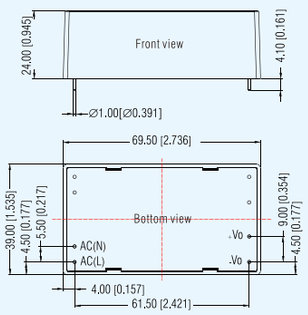


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	-Vo
4	+Vo
5	No Pin
6	No Pin

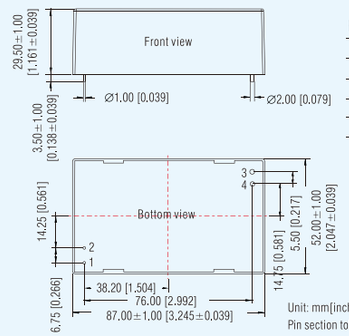
Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

5 LD30-23BxxR2 Series: LxWxH: 69.50 x 39.00 x 24.00(mm)



Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

6 LDE45/60-20Bxx Series: LxWxH: 87.00x52.00x29.50(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	+Vo
4	-Vo

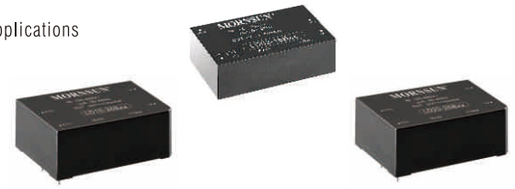
Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

LD Series 3-20W Cost-effective AC/DC Converter (Ultra-wide Input)

Features:

- Suitable for electric power, industrial control and intelligent building applications
- Input voltage range: 90-528VAC/100-745VDC
- Operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC (LD03: 3000VAC)
- Output short-circuit, over-current and over-voltage protection
- IEC/EN/UL62368 approval



LD03-16B

c UL us CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD03-16B03	1.65W	90-528VAC/ 100-745VDC	3.3V/500mA	63
LD03-16B05	2.5W		5V/500mA	70
LD03-16B09	3W		9V/333mA	73
LD03-16B12	3W		12V/250mA	76
LD03-16B15	3W		15V/200mA	76
LD03-16B24	3W		24V/125mA	76

LD10-26B

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD10-26B03	6.6W	90-528VAC/ 100-745VDC	3.3V/2000mA	72
LD10-26B05	10W		5V/2000mA	76
LD10-26B09	10W		9V/1100mA	78
LD10-26B12	10W		12V/900mA	80
LD10-26B15	10W		15V/700mA	80
LD10-26B24	10W		24V/450mA	82

LD20-26B

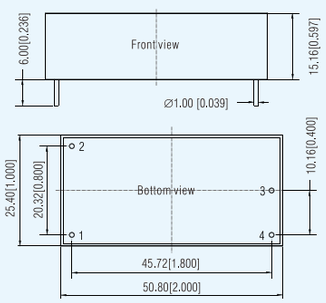
c UL us CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD20-26B03	11.88W	90-528VAC/ 100-745VDC	3.3V/3600mA	74
LD20-26B05	18W		5V/3600mA	78
LD20-26B09	20W		9V/2230mA	79
LD20-26B12	20W		12V/1660mA	82
LD20-26B15	20W		15V/1330mA	83
LD20-26B24	20W		24V/833mA	83

Package Dimension

① LD03-16B Series: LxWxH: 50.80x25.40x15.16(mm)

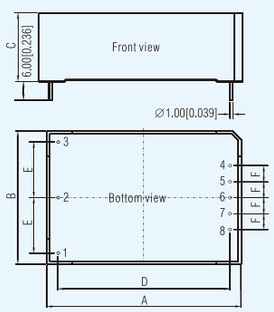


Pin-Out

Pin	Function
1	AC(N)
2	AC(L)
3	-Vo
4	+Vo

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

② LD10/20-26B Series



Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Outine & Dimenions

No.	LD10	LD20
A	62.00	70.00
B	45.00	48.00
C	30.00	30.00
D	54.00	62.00
E	17.50	20.00
F	5.00	5.75
G	12.50	12.50

Pin-Out

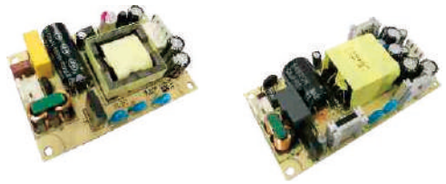
Pin	LD10-26B	LD20-26B
1	NC	NC
2	AC(N)	AC(N)
3	AC(L)	AC(L)
4	+Vo	+Vo
5	No Pin	No Pin
6	No Pin	No Pin
7	No Pin	No Pin
8	-Vo	-Vo

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

LO Series 30-45W Cost-effective Open Frame AC/DC Converter (Multiple Outputs)

Features:

- Input voltage range: 85-264VAC/100-370VDC
- Operating temperature: -25℃ to +70℃
- Isolation voltage 3000VAC
- Stable output, low ripple & noise
- Output short-circuit, over-current and over-voltage protection
- High efficiency, high reliability
- EMI performance meets CISPR32/EN55032 CLASS B
- LO30 series meets IEC/EN/UL62368, EN60335 standards
- LO45 series meets IEC/EN/UL62368 standards
- 2 years warranty



LO30-10Axx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Output voltage/ current (Vo2/Io2)	Output voltage/ current (Vo3/Io3)	Efficiency(%) (typ)
LO30-10A12	30W	85-264VAC/ 100-370VDC	+12V/1250mA	-12V/1250mA	/	82
LO30-10A15	30W		+15V/1000mA	-15V/1000mA	/	82

LO30-10Dxxxx-xx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Output voltage/ current (Vo2/Io2)	Output voltage/ current (Vo3/Io3)	Efficiency(%) (typ)
LO30-10D0505-30	30W	85-264VAC/ 100-370VDC	5V/3000mA	5V/3000mA	/	79
LO30-10D0512-15	30W		5V/2520mA	12V/1440mA	/	81
LO30-10D0524-10	30W		5V/1440mA	24V/960mA	/	84

LO45-10Cxxxx-xx

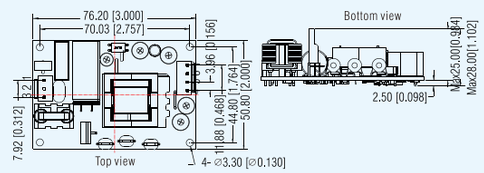
CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Output voltage/ current (Vo2/Io2)	Output voltage/ current (Vo3/Io3)	Efficiency(%) (typ)
LO45-10C050512-20	40.5W	85-264VAC/ 100-370VDC	5V/3000mA	12V/2000mA	-5V/300mA	78
LO45-10C051212-20	42.6W		5V/3000mA	12V/2000mA	-12V/300mA	78
LO45-10C051515-16	43.5W		5V/3000mA	15V/1600mA	-15V/300mA	78

Package Dimension

① LO30-10Axx/LO30-10Dxx Series: LxWxH: 76.20x50.80x28.00(mm)

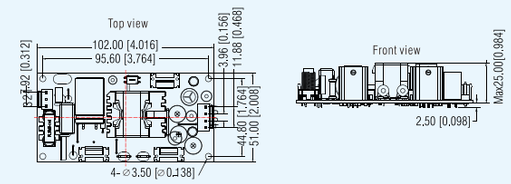


Pin-Out

Pin	Function	Connector	Teminal
1	AC(L)	VH-3A or B2P3-VH or the same Spec.	VH-3Y or VHR-3N or the same Spec.
2	No Pin		
3	AC(N)		
4	Vo2	VH-4A or B4P-VH or the same Spec.	VH-4Y or VHR-4N or the same Spec.
5	COM2		
6	COM1		
7	Vo1		

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
Type A: COM1 is electrically connected to COM2
In JP1 model: VH-3A,Recommend terminal: VH-3Y
Out JP2 model: VH-4A, Recommend terminal: VH-4Y
Mounting hole screwing torque: Max 0.4 N·m
The layout of the device is for reference only, please refer to the actual product

② LO45-10Cxx Series: LxWxH: 102.00x51.00x27.50(mm)



Pin-Out

Pin	Function	Connector	Teminal
1	AC(L)	VH-3A or B2P3-VH or the same Spec.	VH-3Y or VHR-3N or the same Spec.
2	No Pin		
3	AC(N)		
4	Vo2	VH-4A or B4P-VH or the same Spec.	VH-4Y or VHR-4N or the same Spec.
5	COM2		
6	COM1		
7	Vo1		

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
In JP1 model: VH-3A,Recommend terminal: VH-3Y
Out JP2 model: VH-4A, Recommend terminal: VH-4Y
Mounting hole screwing torque: Max 0.4 N·m
The layout of the device is for reference only, please refer to the actual product

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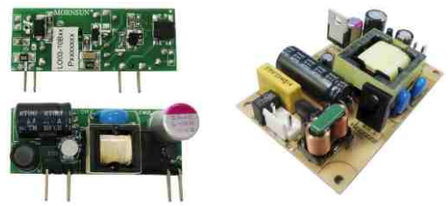
LO Series 3-65W Cost-effective Open Frame AC/DC Converter (Single Output)

Features:

- Input voltage range: 85-264VAC/100-370VDC
  LO05: 165-264VAC/230-370VDC
- Operating temperature: -25℃ to +70℃
- Isolation voltage 3000VAC
- Stable output, low ripple & noise
- Output short-circuit, over-current and over-voltage protection
- High efficiency, high reliability
- EMI performance meets CISPR32/EN55032 CLASS B
- 15-30W series meet IEC/EN/UL62368, EN60335 standards
  45-65W series meet IEC/EN/UL62368 standards
- 2 years warranty (LO30: 3 years warranty)



LO03-10Bxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO03-10B03	2.3W	85-264VAC/ 100-370VDC	3.3V/700mA	69
LO03-10B05	3W		5V/600mA	73
LO03-10B09	3W		9V/330mA	76
LO03-10B12	3W		12V/250mA	78
LO03-10B15	3W		15V/200mA	78
LO03-10B24	3W		24V/125mA	79

LO05-12Bxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO05-12B03	3.3W	165-264VAC/ 230-370VDC	3.3V/1000mA	66
LO05-12B05	5W		5V/1000mA	73
LO05-12B09	5W		9V/550mA	75
LO05-12B12	5W		12V/420mA	77
LO05-12B15	5W		15V/330mA	77
LO05-12B24	5W		24V/210mA	79

LO10-13Bxx

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO10-13B03	6.6W	85-305VAC/ 100-430VDC	3.3V/2000mA	73
LO10-13B05	10W		5V/2000mA	78
LO10-13B09	10W		9V/1100mA	79
LO10-13B12	10W		12V/900mA	81
LO10-13B15	10W		15V/700mA	81
LO10-13B24	10W		24V/450mA	81

LO15-10Bxx

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO15-10B03	9W	85-264VAC/ 100-370VDC	3.3V/3000mA	72
LO15-10B05	14W		5V/2800mA	76
LO15-10B09	15W		9V/1600mA	78
LO15-10B12	15W		12V/1250mA	81
LO15-10B15	15W		15V/1000mA	81
LO15-10B24	15W		24V/625mA	82

LO30-10Bxx

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO30-10B03	13.5W	85-264VAC/ 100-370VDC	3.3VDC/4100mA	73
LO30-10B05	20.5W		5VDC/4100mA	78
LO30-10B09	30W		9VDC/3333mA	82
LO30-10B12	30W		12VDC/2500mA	84
LO30-10B15	30W		15VDC/2000mA	86
LO30-10B24	30W		24VDC/1250mA	87
LO30-10B48	30W		48VDC/625mA	88

LO45-10Bxx

cULus CE RoHS CB Report

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO45-10B03	26.4W	85-264VAC/ 100-370VDC	3.3V/8000mA	76
LO45-10B05	40W		5V/8000mA	82
LO45-10B09	40W		9V/4444mA	84
LO45-10B12	45W		12V/3750mA	84
LO45-10B15	45W		15V/3000mA	86
LO45-10B24	45W		24V/1875mA	86
LO45-10B48	45W		48V/940mA	87

LO65-10Bxx

cULus CE RoHS CB Report

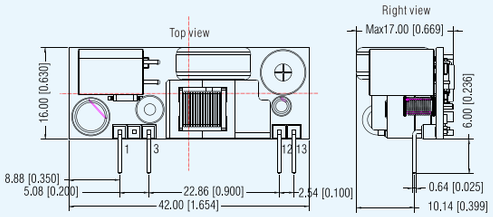
Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO65-10B05	50W	85-264VAC/ 100-370VDC	5V/10000mA	80
LO65-10B09	60W		9V/6600mA	83
LO65-10B12	65W		12V/5420mA	85
LO65-10B15	65W		15V/4340mA	85
LO65-10B24	65W		24V/2710mA	87
LO65-10B48	65W		48V/1360mA	87

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 LO03-10Bxx/LO05-12Bxx Series: LxWxH: 42.00x16.00x17.00(mm)

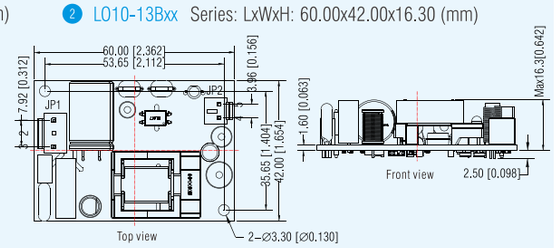


Pin-Out

Pin	Function	Pin	Function
1	AC(N)	12	+Vo
3	AC(L)	13	–Vo

Unit: mm[inch]
Connect pin size: ±0.64[0.025]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

2 LO10-13Bxx Series: LxWxH: 60.00x42.00x16.30 (mm)

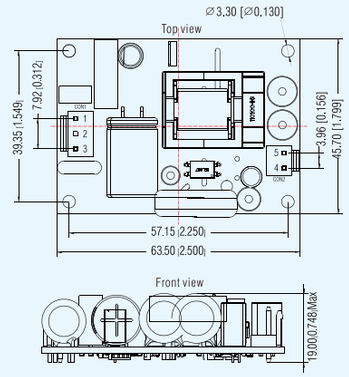


Pin-Out

Pin	Function	Connector	Teminal
1	AC(L)	VH-3A or B2P3-VH or the same Spec.	VH-3Y or VHR-3N or the same Spec.
2	NoPin		
3	AC(N)		
4	-Vo	VH-2A or B2P-VH or the same Spec.	VH-2Y or VHR-2N or the same Spec.
5	+Vo		

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
In JP1 model: VH-3A,Recommend terminal: VH-3Y
Out JP2 model: VH-2A, Recommend terminal: VH-2Y
Mounting hole screwing torque: Max 0.4 N ·m
The layout of the device is for reference only, please refer to the actual product

3 LO15-10Bxx Series: LxWxH: 63.50x45.70x19.00(mm)

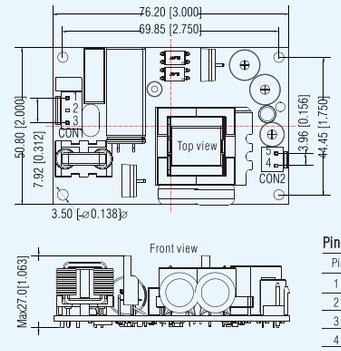


Pin-Out

Pin	Function
1	AC(L)
2	No Pin
3	AC(N)
4	–Vo
5	+Vo

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
In CON1 model: VH-3A, Recommend terminal: VH-3Y
Out CON2 model: VH-2A, Recommend terminal: VH-2Y
Mounting hole screwing torque: Max 0.4 N · m

4 LO30-10Bxx Series: LxWxH: 76.20x50.80x27.00(mm)

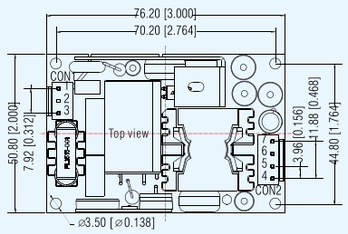


Pin-Out

Pin	Function
1	AC(L)
2	No Pin
3	AC(N)
4	–Vo
5	+Vo

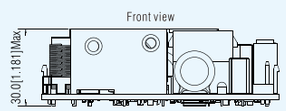
Unit: mm[inch]
General tolerance: ±0.50[±0.020]
In CON1 model: VH-3A, Recommend terminal: VH-3Y
Out CON2 model: VH-2A, Recommend terminal: VH-2Y
Mounting hole screwing torque: Max 0.4 N · m

5 LO45-10Bxx/LO65-10Bxx Series: LxWxH: 76.20x50.80x30.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	No Pin
3	AC(N)
4	–Vo
5	–Vo
6	+Vo
7	+Vo



Unit: mm[inch]
General tolerance: ±0.50[±0.020]
In CON1 model: VH-3A, Recommend terminal: VH-3Y
Out CON2 model: VH-4A, Recommend terminal: VH-4Y
Mounting hole screwing torque: Max 0.4 N · m

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

LHE Series 5-20W AC/DC Converter (Multiple Outputs)

Features:

- Standard package, suitable for industrial control application requiring high EMC performance
- Input voltage range: 85-264VAC/100-370VDC (LH60-20Bxx-DT: 55-264VAC/77-370VDC)
- Isolation voltage 4000VAC (LH40: 3000VAC)
- Effiency up to 87%
- Low ripple & noise
- Output short-circuit, over-current and over-voltage protection
- EMI performance meets CISPR32/EN55032 CLASS B
- Optional packages: PCB mounting, chassis mounting, DIN-Rail (TS35) mounting
- IEC/EN/UL62368, IEC/UL/EN60950 approval

A2 Chassis Mounting

A5 Chassis Mounting

A6 DIN-Rail Mounting

A4 DIN-Rail Mounting

LHE05-20Axxxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE05-20A05**	5W	85-264VAC/ 100-370VDC	+5V/500mA	−5V/500mA	73
LHE05-20A12**	5W		+12V/210mA	-12V/210mA	77
LHE05-20A15**	5W		+15V/160mA	-15V/160mA	77

LHE05-20Dxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE05-20D0505-01	5W	85-264VAC/ 100-370VDC	5V/900mA	5V/100mA	70
LHE05-20D0512-01	5W		5V/750mA	12V/100mA	72
LHE05-20D0515-01	5W		5V/700mA	15V/100mA	72
LHE05-20D0524-01	5.4W		5V/600mA	24V/100mA	74

LHE10-20Cxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE10-20C0512-02	10W	85-264VAC/ 100-370VDC	5V/1000mA	±12V/200mA	75
LHE10-20C0515-02	10W		5V/900mA	±15V/200mA	75

LHE15-20Axxxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE15-20A05**	15W	85-264VAC/ 100-370VDC	+5V/1500mA	−5V/1500mA	76
LHE15-20A12**	15W		+12V/650mA	-12V/650mA	80
LHE15-20A15**	15W		+15V/500mA	-15V/500mA	81

LHE15-20Dxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE15-20D0505-08	15W	85-264VAC/ 100-370VDC	5V/2000mA	5V/800mA	76
LHE15-20D0512-04	15W		5V/2000mA	12V/400mA	78
LHE15-20D0524-02	15W		5V/2000mA	24V/200mA	78
LHE15-20D0524-04	15W		5V/1000mA	24V/400mA	80

LHE05-20Cxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE05-20C0505-01	5W	85-264VAC/ 100-370VDC	5V/800mA	±5V/100mA	70
LHE05-20C0512-01	5.4W		5V/600mA	±12V/100mA	73
LHE05-20C0515-01	5.4W		5V/600mA	±15V/80mA	74

LHE10-20Axxxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE10-20A05**	10W	85-264VAC/ 100-370VDC	+5V/1000mA	−5V/1000mA	76
LHE10-20A12**	10W		+12V/450mA	-12V/450mA	80
LHE10-20A15**	10W		+15V/350mA	-15V/350mA	81

LHE10-20Dxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE10-20D0505-02	10W	85-264VAC/ 100-370VDC	5V/1800mA	5V/200mA	75
LHE10-20D0512-02	10W		5V/1500mA	12V/200mA	78
LHE10-20D0515-02	10W		5V/1400mA	15V/200mA	79
LHE10-20D0524-02	10W		5V/1000mA	24V/200mA	80

LHE15-20Cxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE15-20C0505-05	15W	85-264VAC/ 100-370VDC	5V/2000mA	±5V/500mA	75
LHE15-20C0512-02	15W		5V/2000mA	±12V/200mA	77
LHE15-20C0515-02	15W		5V/1800mA	±15V/200mA	78

LHE20-20Axxxx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE20-20A12**	20W	85-264VAC/ 100-370VDC	+12V/830mA	−12V/830mA	82
LHE20-20A15**	20W		+15/650mA	-15/650mA	83

LHE20-20Cxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE20-20C0512-04	20W	85-264VAC/ 100-370VDC	5V/2000mA	±12V/400mA	78
LHE20-20C0515-03	20W		5V/2000mA	±15V/300mA	79

LHE20-20Dxxxx-xx

RoHS

Product Program

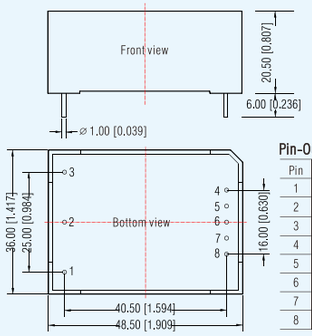
Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LHE20-20D0512-06	20W	85-264VAC/ 100-370VDC	5V/2500mA	12V/600mA	78
LHE20-20D0515-05	20W		5V/2500mA	15V/500mA	78
LHE20-20D0524-03	20W		5V/2500mA	24V/300mA	78

Note:

1. Standard LHE series meet the requirements of surge level of ±1KV/2KV (level three). If the application requires higher performance for surge, our LH-ER2 series for ±2KV/4KV (level four) and recommended peripheral circuits for ±2KV/4KV (level four) are available.
2. If the application requires higher performance for surge, our matching EMC auxiliary devices are available. For example, the standard LHE(05-25) series matching with FC-LX1D are able to reach ±2KV/4KV (level four).
3. Product packages are available with A2 chassis mounting and A4 DIN-Rail mounting, detailed application please refer to the datasheet.
4. Products marked with "**" feature that Vo2 is the main circuit. Other products feature that Vo1 is the main circuit.

Package Dimension

① LHE05-20A/C/Dxx Series: LxWxH: 48.50x36.00x20.50(mm)

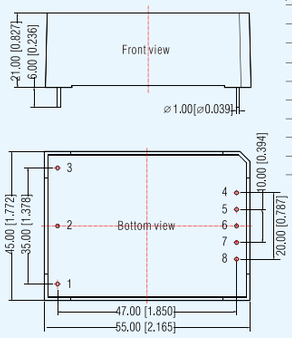


Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Pin-Out

Pin	LHE05-20A	LHE05-20C	LHE05-20D
1	⏚	⏚	⏚
2	AC(N)	AC(N)	AC(N)
3	AC(L)	AC(L)	AC(L)
4	+Vo	+Vo2	+Vo2
5	No Pin	COM	-Vo2
6	COM	-Vo2	No Pin
7	No Pin	+Vo1	+Vo1
8	-Vo	-Vo1	-Vo1

② LHE10-20A/C/Dxx Series: LxWxH: 109.00x58.50x30.00(mm)

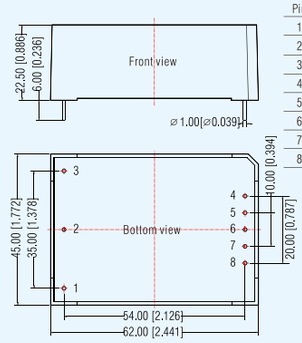


Pin-Out

Pin	LHE10-20A	LHE10-20C	LHE10-20D
1	⏚	⏚	⏚
2	AC(N)	AC(N)	AC(N)
3	AC(L)	AC(L)	AC(L)
4	+Vo	+Vo2	+Vo2
5	No Pin	COM	-Vo2
6	COM	-Vo2	No Pin
7	No Pin	+Vo1	+Vo1
8	-Vo	-Vo1	-Vo1

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

③ LHE15-20A/C/Dxx Series: LxWxH: 62.00x45.00x22.50(mm)

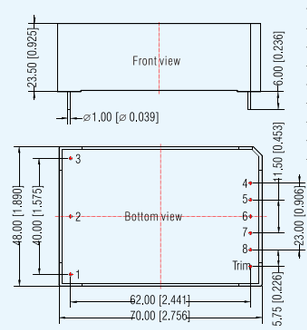


Pin-Out

Pin	LHE15-20A	LHE15-20C	LHE15-20D
1	⏚	⏚	⏚
2	AC(N)	AC(N)	AC(N)
3	AC(L)	AC(L)	AC(L)
4	+Vo	+Vo2	+Vo2
5	No Pin	COM	-Vo2
6	COM	-Vo2	No Pin
7	No Pin	+Vo1	+Vo1
8	-Vo	-Vo1	-Vo1

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

④ LHE20-20A/C/Dxx Series: LxWxH: 70.00x48.00x23.50(mm)



Pin-Out

Pin	LHE20-20A	LHE20-20C	LHE20-20D
1	⏚	⏚	⏚
2	AC(N)	AC(N)	AC(N)
3	AC(L)	AC(L)	AC(L)
4	+Vo	+Vo2	+Vo2
5	No Pin	COM	-Vo2
6	COM	-Vo2	No Pin
7	No Pin	+Vo1	+Vo1
8	-Vo	-Vo1	-Vo1
Trim	No Pin	No Pin	No Pin

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

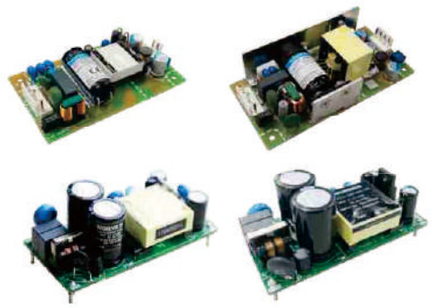
• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Specialized for Electric Power 10-30W Open Frame AC/DC Converter for Electric Power (LO Series)

Features:

- Specific power supply designing for smart grid
- Ultra-thin design, the height of the product does not exceed 22mm
- Ultra-wide input voltage range: 85-264VAC/88-370VDC
- Ultra-wide operating temperature: -40℃ to +85℃
- High reliability, low ripple & noise
- EMI performance meets CISPR32/EN55032 CLASS B
- Immunity meets electricity standard Level 4
- Meets impulse voltage requirements of 1.2/50us 5KV
- Meet UL/EN/IEC62368 standards
- EN62368 safety approval



LO15-23BxxE

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO15-23B03E	9.9W	85-305VAC/ 88-430VDC	3.3V/3000mA	71
LO15-23B05E	15W		5V/3000mA	78
LO15-23B12E	15.6W		12V/1300mA	83
LO15-23B15E	15W		15V/1000mA	84
LO15-23B24E	16.8W		24V/700mA	85

LO30-23BxxE

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO30-23B03E	19.8W	85-305VAC/ 88-430VDC	3.3V/6000mA	77
LO30-23B05E	30W		5V/6000mA	82
LO30-23B12E	30W		12V/2500mA	86
LO30-23B15E	30W		15V/2000mA	87
LO30-23B24E	31.2W		24V/1300mA	88

LO50-23BxxE

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO50-23B03E	33W	85-305VAC/ 88-430VDC	3.3V/10A	84
LO50-23B05E	50W		5V/10A	86
LO50-23B09E	50.4W		9V/5.6A	86
LO50-23B12E	50.4W		12V/4.2A	86
LO50-23B15E	51W		15V/3.4A	86
LO50-23B24E	50.4W		24V/2.1A	87
LO50-23B27E	51.3W		27V/1.9A	88
LO50-23B48E	52.8W		48V/1.1A	89

LO75-20BxxE

CE RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO75-20B03E	39.6W	85-264VAC/ 88-370VDC	3.3V/12A	82
LO75-20B05E	60W		5V/12A	84
LO75-20B09E	75.6W		9V/8.4A	86
LO75-20B12E	76.8W		12V/6.4A	88
LO75-20B15E	75W		15V/5A	88
LO75-20B24E	76.8W		24V/3.2A	89
LO75-20B27E	75.6W		27V/2.8A	89
LO75-20B48E	76.8W		48V/1.6A	90

LO10-26Dxxxx-xxL

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LO10-26D0512-04L	10.92W	57-528VAC/ 80-745VDC	5.1VDC/1.2A	12VDC/0.4A	78

LO15-26Dxxxx-xx

RoHS

Product Program

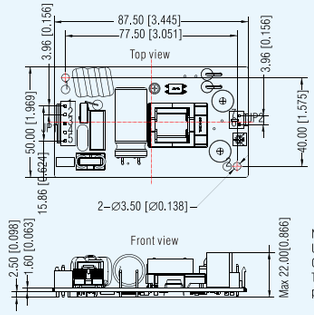
Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Efficiency(%) (typ)
LO15-26D1305-03	15W	57-528VAC/ 80-745VDC	13.5VDC/1.0A	5VDC/0.3A	78

Note: 1. 05V/24A and 05V/15A outputs customization is acceptable.
2. If the application requires higher performance for EMC, please refer to the recommended peripheral circuit in the datasheet.

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

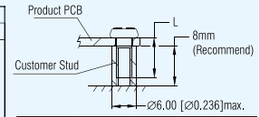
Package Dimension

① LO15-23Bxx-E Series: LxWxH: 87.50x50.00x22.00(mm)



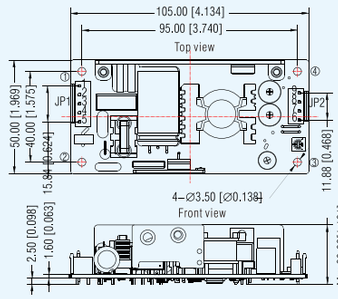
Note:
Unit: mm[inch]
General tolerances: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

Pin-Out			
Connectors	Pin	Mark	Client Connectors
JP1	1	PE	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	2	No Pin	
	3	AC(N)	
	4	No Pin	
	5	AC(L)	
JP2	6	+Vo	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	7	-Vo	



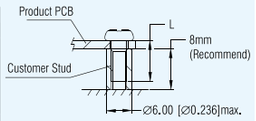
Position	Screw Spec	L(Recommend)	Torque(max)
① – ②	M3	6mm	0.4N · m

② LO30-23Bxx-E Series: LxWxH: 105.00 x 50.00 x 30.00(mm)



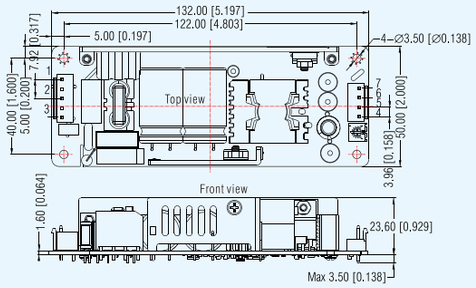
Note:
Unit: mm[inch]
General tolerances: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

Pin-Out			
Connectors	Pin	Mark	Client Connectors
JP1	1	PE	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	2	No Pin	
	3	AC(N)	
	4	No Pin	
	5	AC(L)	
JP2	6	+Vo	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	7	+Vo	
	8	-Vo	
	9	-Vo	



Position	Screw Spec	L(Recommend)	Torque(max)
① – ④	M3	6mm	0.4N · m

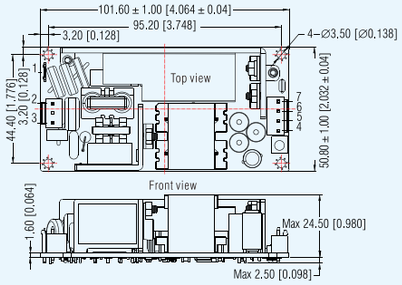
③ LO50-23Bxx-E Series: LxWxH: 132.00 x 50.00 x 27.10(mm)



Pin-Out			
Connectors	Pin	Product Connector	Client Connectors
	1	PE	Housing: JST VHR Contact: JST SVH-21T -P1.1 or equivalent
	2	AC(N)	JST B5P–VH or equivalent
	3	AC(L)	
	4	-Vo	JST B4P–VH or equivalent
	5		
	6	-Vo	
	7		

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

④ LO75-20Bxx-E Series: LxWxH: 101.60 x 50.80 x 27.00(mm)

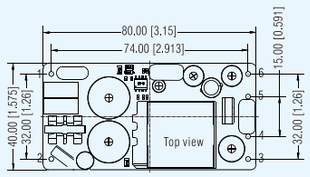


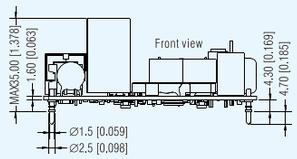
Pin-Out			
Connectors	Pin	Product Connector	Client Connectors
	1	PE	DEGSON K12 KST FDD 5.5–250 or equivalent
	2	AC(N)	JST B3P–VH or equivalent
	3	AC(L)	
	4	-Vo	JST B4P–VH or equivalent
	5		
	6	-Vo	
	7		

Housing: JST VHR
Contact: JST SVH-21T-P1.1or equivalent

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

⑤ LO10-26Dxxxx-xxL/LO15-26Dxxxx-xx Series: LxWxH: 80.00x40.00x35.00(mm)





Unit: mm[inch]
General tolerance: ±0.50[±0.020]
FR-4, 1.6mm thick double sided glass fiber PCB

Pin	Name	Function Define
1	AC(L)	AC voltage line wire(L wire) or DC voltage positive
2	AC(N)	AC voltage neutral wire(N wire) or DC voltage negative
3	+Vo2	The second output positive(+)
4	-Vo2	The second output negative(-)
5	-Vo1	The first output voltage negative(-)
6	+Vo1	The first output voltage positive (+)

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Specialized for Electric Power 6-30W Open Frame AC/DC Converter for Electric Power (LO Series)

Features:

- Input voltage range: LO20: 165-264VAC/230-370VDC
  LO30: 85-264VAC/100-370VDC
- Isolation voltage 3000VAC
- Triple outputs, high output voltage accuracy
- Efficiency up to 78%
- Output short circuit, over-current, over-voltage protection
- Safety Class: CLASS II
- Meets IEC60950 standard

LO20-26Dxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Output voltage/ current (Vo2/Io2)	Efficiency(%) (typ)
LO20-26D1212-05	24.2W	165-480VAC/230-680VDC	12.15VDC/1500mA	12VDC/500mA	80

LO10-24BxxK

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO10-24B05K	6W	30-280VAC/ 30-400VDC	5V/1200mA	71
LO10-24B12K	6.6W		12V/550mA	77
LO10-24B13K	6.5W		13V/500mA	77

LO20-10Cxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Output voltage/ current(Vo3/Io3)	Efficiency(%) (typ)
LO20-10C0512-05	17.8W	85-264VAC/100-370VDC	5V/2000mA	12V/500mA	−12V/150mA	79
LO20-10C0512-01	18.7W	165-264VAC/230-370VDC	5V/500mA	12V/1200mA	−12V/150mA	78

LO30-10Cxxxx-xx

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Output voltage/ current(Vo3/Io3)	Efficiency(%) (typ)
LO30-10C0512-12	31.2W	85-264VAC/100-373VDC	5V/3000mA	12V/1200mA	−12V/150mA	78
LO30-10C0512-20	35.2W	85-264VAC/100-370VDC	12V/2000mA	5V/2000mA	−12V/100mA	78

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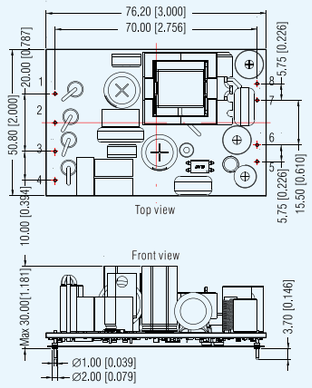
Package Dimension

1 LO20-26Dxxxx-xx Series: LxWxH: 76.20 x 50.80 x 30.00(mm)

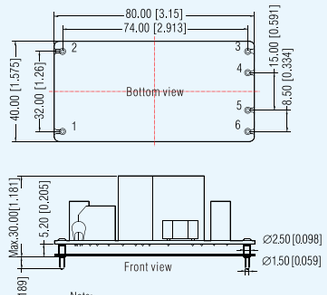


Pin-Out

Pin	Function
1	A
2	B
3	C
4	N
5	+Vo1
6	-Vo1
7	-Vo2
8	+Vo2

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

2 LO10-24BxxK Series: LxWxH: 80.00 x 40.00 x 30.00(mm)

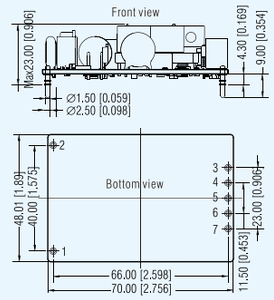


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	NC
4	None
5	OUT1−
6	OUT1+

Note:
1. Unit: mm[inch]
2. General tolerances: ±0.50[±0.020]
3. FR-4,1.6mm thick double sided glass fiber PCB
4. 0.40mm black MYLAR insulating sheet material

3 LO20-10C0512-01 Series: LxWxH: 70.00 x 48.00 x 23.50(mm)

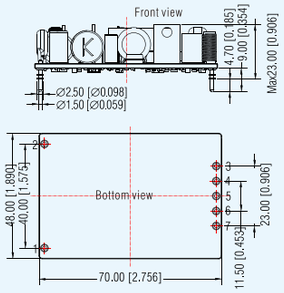


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	-Vo1
4	+Vo1
5	-Vo2
6	COM
7	+Vo2

Unit: mm[inch]
General tolerance: ±0.50[±0.020]

LO20-10C0512-05 Series: LxWxH: 70.00 x 48.00 x 23.00(mm)

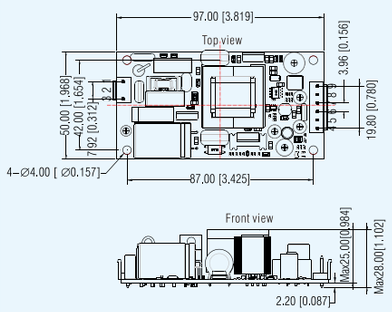


Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	-Vo1
4	+Vo1
5	-Vo2
6	COM
7	+Vo2

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

4 LO30-10C0512-12 Series: LxWxH: 97.00x50.00x28.00(mm)

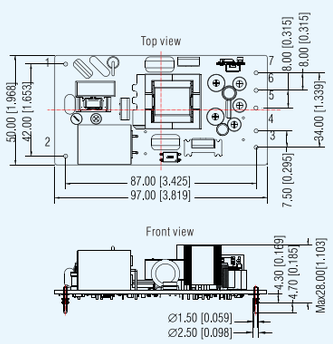


Pin-Out

Pin	Function
1	AC(L)
2	No Pin
3	AC(N)
4	GND
5	+5V
6	NC
7	-12V
8	COM
9	+12V

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

LO30-10C0512-20 Series: LxWxH: 97.00x50.00x28.00(mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	GND
4	+12V
5	-12V
6	COM
7	+5V

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±1.00[±0.039]

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Specialized for Medical 5-65W AC/DC Converter for Medical

Features:

- EN60601-1, ANSI/AAMI ES60601-1 approval (2xMOPP)
- Input voltage range: 85-264VAC/100-370VDC
- Operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC
- Operating altitude up to 5000m
- Low standby power consumption < 0.1W
- Low leakage current < 100uA
- Ripple & noise: 50mV (Typ.)
- Output short circuit, over-current, over-voltage protection
- Optional packages: PCB mounting, chassis mounting, DIN-Rail (TS35) mounting

LD05-20BxxMU

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LD05-20B05MU	5W	85-264VAC/ 100-370VDC	5V/1000mA	76
LD05-20B12MU	5W		12V/420mA	80
LD05-20B15MU	5W		15V/333mA	81
LD05-20B24MU	5.5W		24V/230mA	81

LH15-20BxxMU

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LH15-20B05MU	14W	85-264VAC/ 100-370VDC	5V/2800mA	78
LH15-20B12MU	15W		12V/1250mA	83
LH15-20B15MU	15W		15V/1000mA	83
LH15-20B18MU	15W		18V/833mA	84
LH15-20B24MU	15W		24V/625mA	86

LH25-20BxxMU

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LH25-20B05MU	20.5W	85-264VAC/ 100-370VDC	5V/4100mA	82
LH25-20B12MU	25W		12V/2100mA	88
LH25-20B15MU	25W		15V/1600mA	88
LH25-20B18MU	25W		18V/1400mA	88
LH25-20B24MU	25W		24V/1100mA	89

LO45-20BxxMU

RoHS

Product Program (Pending)

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO45-20B03MU	26.4W	85-264VAC/ 100-370VDC	3.3V/8000mA	82
LO45-20B05MU	40W		5V/8000mA	84
LO45-20B12MU	45W		12V/3750mA	86
LO45-20B15MU	45W		15V/3000mA	86
LO45-20B24MU	45W		24V/1875mA	90
LO45-20B36MU	45W		36V/1250mA	90
LO45-20B48MU	45W		48V/940mA	90

LO65-20BxxMU

RoHS

Product Program (Pending)

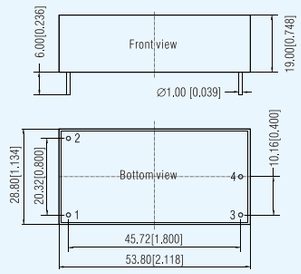
Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
LO65-20B03MU	33W	85-264VAC/ 100-370VDC	3.3V/10000mA	84
LO65-20B05MU	50W		5V/10000mA	85
LO65-20B12MU	65W		12V/5420mA	89
LO65-20B15MU	65W		15V/4340mA	90
LO65-20B24MU	65W		24V/2710mA	90
LO65-20B36MU	65W		36V/1810mA	91
LO65-20B48MU	65W		48V/1360mA	91

Note:
1. Models meet the requirements of surge level of ±1KV. If the application requires higher performance for surge, our recommended peripheral circuits for 4KV (level four) are available.
2. If the application requires higher performance for surge, our matching EMC auxiliary devices are available. For example, products matching with FC-LX1D are able to reach 4KV (level four).
3. LH-MU series meet the requirements of ±1KV surge level. If the application requires higher performance, please refer to our recommended circuit.
4. Detailed application please refer to the datasheet.

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 LD05-20BxxMU Series: LxWxH: 53.80x28.80x19.00(mm)



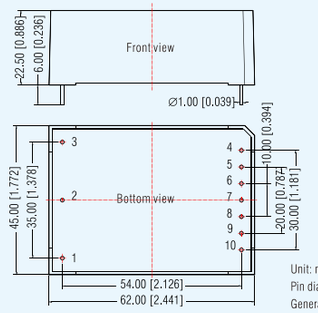
Pin-Out

Pin	Function
1	AC(N)
2	AC(L)
3	+Vo
4	-Vo

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Note: A2 chassis mounting and A4 DIN-Rail mounting is available for these products. Customization is acceptable.

2 LH15-20BxxMU Series: LxWxH: 62.00 x 45.00 x 22.50 (mm)

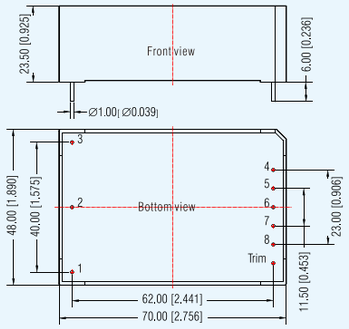


Pin-Out

Pin	Function
1	No pin
2	AC(N)
3	AC(L)
4	No Pin
5	+Vo
6	No Pin
7	No Pin
8	No Pin
9	-Vo
10	No Pin

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

3 LH25-20BxxMU Series: LxWxH: 70.00 x 48.00 x 23.50(mm)

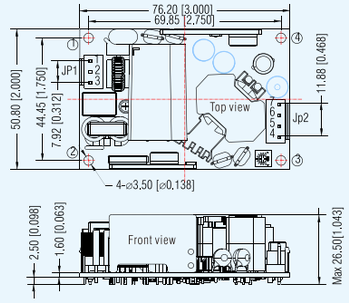


Pin-Out

Pin	Function
1	No Pin
2	AC(N)
3	AC(L)
4	+Vo
5	No Pin
6	No Pin
7	No Pin
8	-Vo
Trim	Trim

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

4 LO45-20BxxMU Series: LxWxH: 76.20 x 50.80 x 26.50(mm)

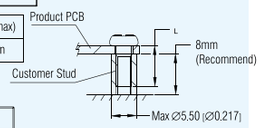


Pin-Out

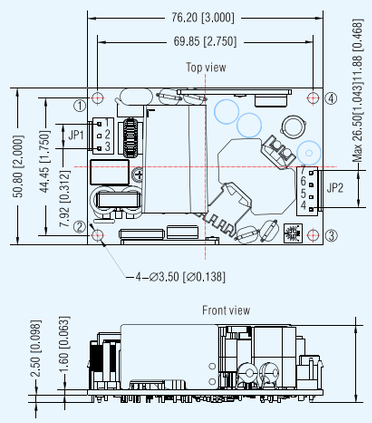
Connectors	Pin	Mark	Client Connectors
JP1	1	AC(L)	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	2	NoPin	
	3	AC(N)	
JP2	4	-Vo	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	5	-Vo	
	6	+Vo	
	7	+Vo	

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

Position	Screw Spec.	L(Recommend)	Torque(max)
① – ④	M3	6mm	0.4N·m



5 LO65-20BxxMU Series: LxWxH: 76.20 x 50.80 x 26.50(mm)

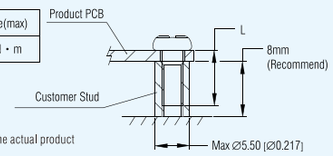


Pin-Out

Connectors	Pin	Mark	Client Connectors
JP1	1	AC(L)	Housing: JST VHR Contact: JST SVH-21T-P1.1or equivalent
	2	NoPin	
	3	AC(N)	
JP2	4	-Vo	Housing: JST VHR Contact: JST SVH-21T-P1.1 or equivalent
	5	-Vo	
	6	+Vo	
	7	+Vo	

Position	Screw Spec.	L(Recommend)	Torque(max)
① – ④	M3	6mm	0.4N · m

Unit: mm[inch]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product



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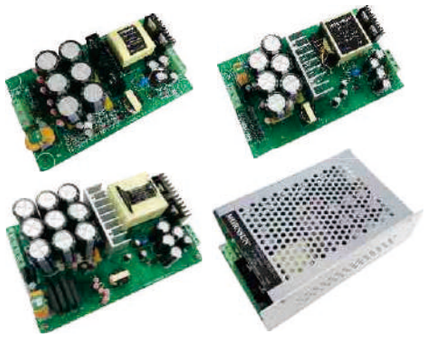
Specialized for Mining 40-150W Ultra-wide, Ultra-high Input Voltage AC/DC Converter for Mining (PVA Series)

Features:

- Specially designed for electrical equipment in the coal mining industry
- Ultra-wide input voltage range: 85-850VAC/85-900VAC/460-1500VAC
- Industrial grade operating temperature: -25℃ to +70℃
- Isolation voltage 4000VAC
- High reliability, high efficiency, long lifespan
- Output short circuit, over-current and over-voltage protection
- Ultra-low input impulse current
- EMS: immunity, EFT/Surge: ±4KV perf. Criteria B
  (The surge immunity of PVA120-27Bxx-C series is ±2KV)



PVA40-26B

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
PVA40-26B12	40W	460-1500VAC	12V/3400mA	82
PVA40-26B28	40W		28V/1430mA	85
PVA40-26B35	40W		35V/1150mA	85

PVA40-27B

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
PVA40-27B18	40W	85-900VAC	18V/2222mA	86
PVA40-27B24	40W		24V/1667mA	86
PVA40-27B30	40W		30V/1333mA	86

PVA70-27B

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
PVA70-27B24	70W	85-900VAC	24V/2917mA	87
PVA70-27B28	70W		28V/2500mA	87
PVA70-27B35	70W		35V/2000mA	87

PVA120-27B

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
PVA120-27B24	120W	85-900VAC	24V/5A	82
PVA120-27B28	120.4W		28V/4.3A	82
PVA120-27B35	122.5W		35V/3.5A	82

PVA120-27B-C

RoHS

Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
PVA120-27B30-C	120W	85-900VAC	30V/4A	82
PVA120-27B35-C	122.5W		35V/3.5A	82

PVA150-27B

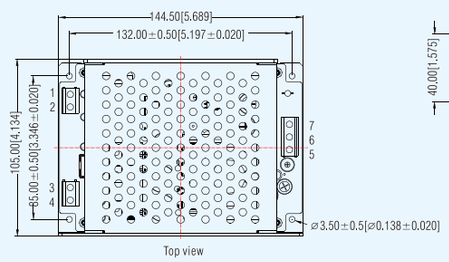
RoHS

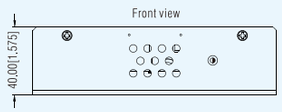
Product Program

Model number	Power	Input voltage range	Output voltage/ current (Vo1/Io1)	Efficiency(%) (typ)
PVA150-27B24	150W	85-850VAC	24V/6.25A	87
PVA150-27B28	150W		28V/5.36A	87
PVA150-27B35	150W		35V/4.3A	87

Package Dimension

1 PVA40-26B Series: LxWxH: 144.50x105.00x40.00(mm)





Unit: mm[inch]
Wire range: 24-12AWG
Tightening torque: Max 0.4 N·m
General tolerance: ±1.00[±0.039]

Pin-Out

Pin	Function
1	AC(L)
2	AC(L)
3	AC(N)
4	AC(N)
5	+Vo
6	-Vo
7	Trim

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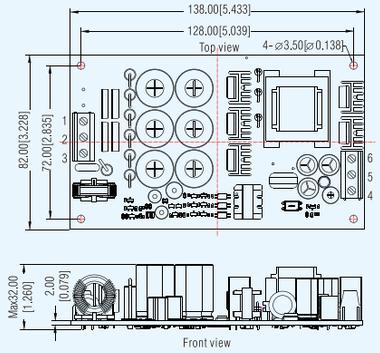
Package Dimension

2 PVA40-27B Series: LxWxH: 138.00x82.00x32.00(mm)

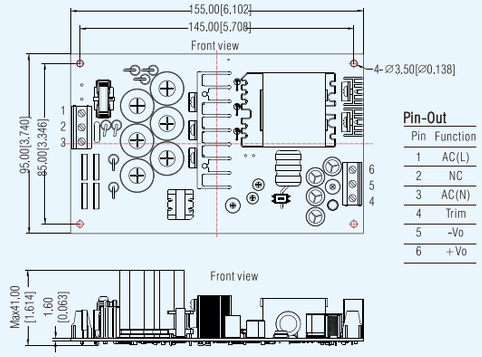


Pin-Out

Pin	Function
1	AC(L)
2	NC
3	AC(N)
4	Trim
5	-Vo
6	+Vo

Unit: mm[inch]
Wire range: 24-12AWG
Tightening torque: Max 0.4 N·m
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only,please refer to the actual product

3 PVA70-27B Series: LxWxH: 155.00x95.00x41.00(mm)

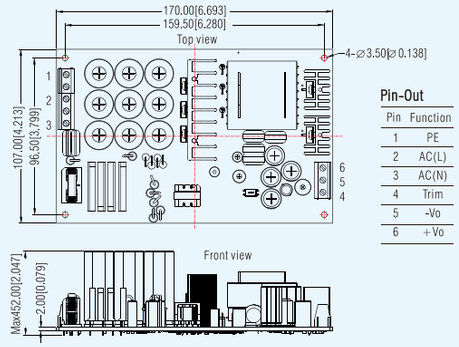


Pin-Out

Pin	Function
1	AC(L)
2	NC
3	AC(N)
4	Trim
5	-Vo
6	+Vo

Unit: mm[inch]
Wire range: 24-12AWG
Tightening torque: Max 0.4 N·m
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only,please refer to the actual product

4 PVA120-27B Series: LxWxH: 170.00x107.00x52.00(mm)

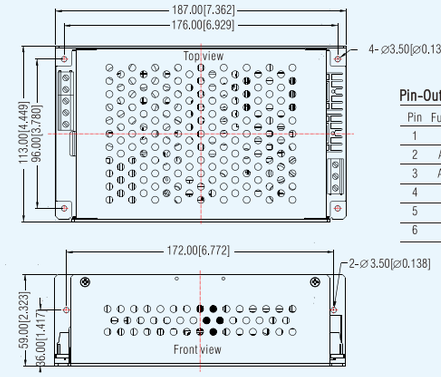


Pin-Out

Pin	Function
1	PE
2	AC(L)
3	AC(N)
4	Trim
5	-Vo
6	+Vo

Unit: mm[inch]
Wire range: 24-12AWG
Tightening torque: Max 0.4 N·m
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only,please refer to the actual product

5 PVA120-27B-C Series: LxWxH: 187.00x113.00x59.00(mm)

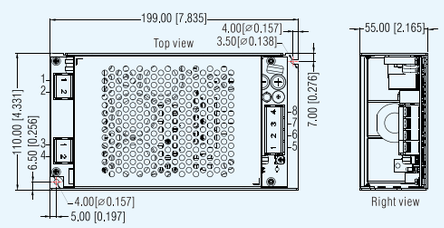


Pin-Out

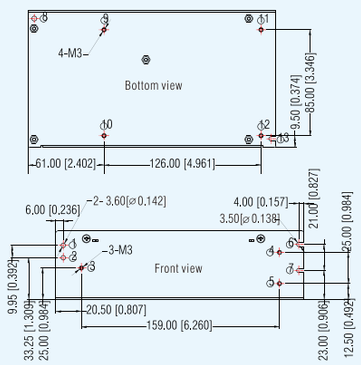
Pin	Function
1	PE
2	AC(L)
3	AC(N)
4	Trim
5	-Vo
6	+Vo

Unit: mm[inch]
Wire range: 24-12AWG
Tightening torque: Max 0.4 N·m
General tolerance: ±1.00[±0.039]

6 PVA150-27B Series: LxWxH: 199.00x110.00x55.00(mm)



Unit: mm[inch]
Wire range: 22-12AWG
Connector torque: M3.5, 0.8N.m
General tolerances: ±1.00[±0.039]
①~⑧any position must be connected to PE



Pin-Out

Pin	Function
1	AC(N)
2	AC(N)
3	AC(L)
4	AC(L)
5	-Vo
6	-Vo
7	+Vo
8	+Vo

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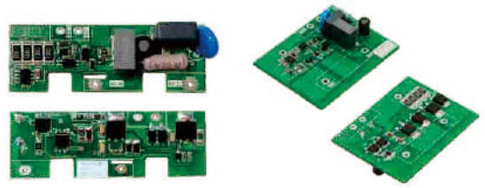
KM Series 6.5VA Contactor Control Module

Features:

- Energy-saving wide-voltage contactor control module
- Ultra-wide input voltage range: 90-275VAC/VDC
- Operating temperature: -40℃ to +70℃
- Apparent power lower than 6.5VA
- High reliability: 3600 times/H of operating frequency
- Quick response, switch delay less than 75ms
- EMS performance meets CISPR22/EN55022 CLASS A
- 5 years warranty
- Customization is available



KM95-C0-0

RoHS

Product Program

Model number	Apparent power	Control voltage range	Rated operating current	No-load switch frequency
KM95-C0-0	6.5VA	90-275VAC/VDC	95A	3600 times/H

KM115-C0-0

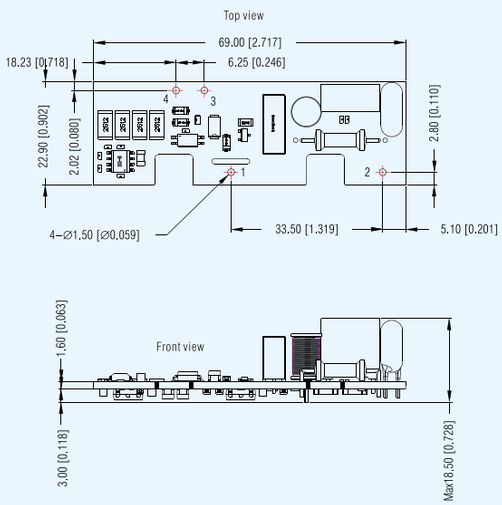
RoHS

Product Program

Model number	Apparent power	Control voltage range	Rated operating current	No-load switch frequency
KM115-C0-0	6.5VA	75-305VAC/VDC	115A	3600 times/H

Package Dimension

① KM95-C0-0 Series: LxWxH: 69.00 x 22.90 x 18.50 (mm)

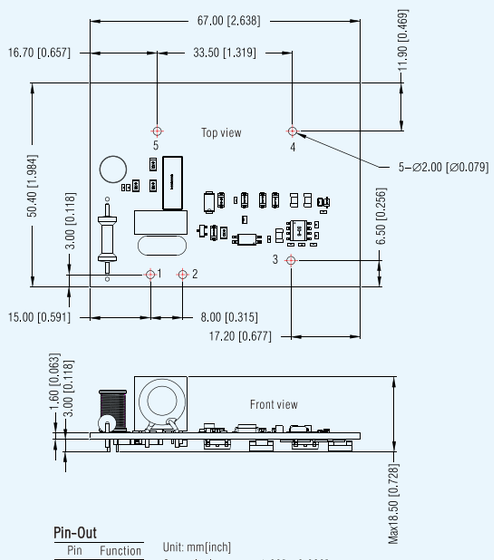


Pin-Out

Pin	Function
1	AC(N)
2	AC(L)
3	OUT1
4	OUT2

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

② KM115-C0-0 Series: LxWxH: 67.00 x 50.40 x 18.50 (mm)



Pin-Out

Pin	Function
1	AC(L)
2	AC(N)
3	NC
4	OUT1
5	OUT2

Unit: mm[inch]
General tolerance: ±1.00[±0.039]
The layout of the device is for reference only, please refer to the actual product

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Fixed Input Voltage 1W DFN Package, Isolated & Unregulated Output DC/DC Converter

Features:

- Ultra-small, ultra-thin DFN package (9.00 x 7.00 x 3.10mm)
- Operating temperature: -40℃ to +125℃
- Efficiency up to 85%
- Continuous short-circuit protection
- IEC62368/UL62368/EN62368 approved
- AEC-Q100 approved (B_MT-1WR4 series)

B_MT-1WR4

RoHS CB Report

Product Program

Model number	Power	Input voltage (VDC)	Output voltage/ current (Vo/Io)	Isolation (VDC)	Efficiency(%) (typ)
B0505MT-1WR4	1W	4.5-5.5 (5VDC)	5V/200mA	3000	81/85

D_T-1WR4

RoHS CB Report

Product Program

Model number	Power	Input voltage (VDC)	Output voltage/ current (Vo/Io)	Isolation (VDC)	Efficiency(%) (typ)
D050505T-1WR4	1W	4.5-5.5 (5VDC)	5V/100mA	3000	83/87

E_T-1WR4

RoHS CB Report

Product Program

Model number	Power	Input voltage (VDC)	Output voltage/ current (Vo/Io)	Isolation (VDC)	Efficiency(%) (typ)
E0505T-1WR4	1W	4.5-5.5 (5VDC)	±5V/±100mA	3000	83/87

FB_T-1WR4

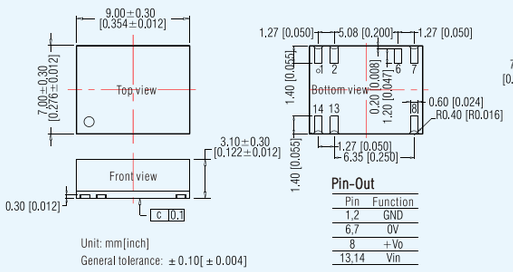
RoHS CB Report

Product Program

Model number	Power	Input voltage (VDC)	Output voltage/ current (Vo/Io)	Isolation (VDC)	Efficiency(%) (typ)
FB0505T-1WR4	1W	4.5-5.5 (5VDC)	5V/200mA	4200	83/87

Package Dimension

① B_MT-1WR4 Series: LxWxH: 9.00 x 7.00 x 3.10(mm)

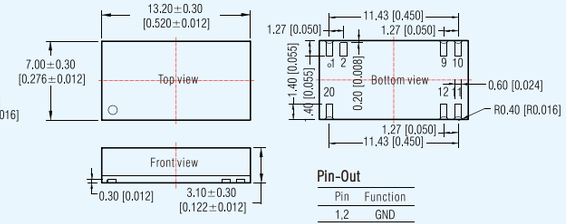


Pin-Out

Pin	Function
1,2	GND
6,7	0V
8	+Vo
13,14	Vin

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

② D_T-1WR4/FB_T-1WR4 Series: LxWxH: 13.20 x 7.00 x 3.10(mm)

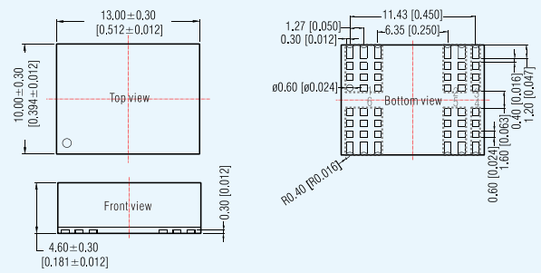


Pin-Out

Pin	Function
1,2	GND
9	0V1
10	Vo1
11	Vo2
12	0V2
20	Vin

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

③ E_T-1WR4 Series: LxWxH: 13.20 x 7.00 x 3.10(mm)



Pin-Out

Pin	Function
1	GND
2	0V
3	-Vo
4	+Vo
5	0V
6	Vin

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Fixed Input Voltage 1-2W SMD Package, Isolated & Unregulated Output Series

Features:

- Isolation voltage 1500/3000VDC
- ESD Immunity is up to ±8kV
- Operating temperature: -40℃ to +105℃
- Efficiency up to 85%
- High power density
- Continuous short-circuit protection
- Compact SMD package

A_XT-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
A0505XT-1WR3	1W	4.5-5.5 (5VDC)	±5V/±100mA	1500	78/82
A0509XT-1WR3	1W		±9V/±56mA		79/83
A0512XT-1WR3	1W		±12V/±42mA		79/83
A0515XT-1WR3	1W		±15V/±34mA		79/83
A0524XT-1WR3	1W		±24V/±21mA		81/85
A1205XT-1WR3	1W	10.8-13.2 (12VDC)	±5V/±100mA	1500	78/82
A1209XT-1WR3	1W		±9V/±56mA		79/83
A1212XT-1WR3	1W		±12V/±42mA		79/83
A1215XT-1WR3	1W		±15V/±34mA		79/83
A1224XT-1WR3	1W		±24V/±21mA		81/85
A1515XT-1WR3	1W	13.5-16.5 (15VDC)	±15V/±34mA	1500	79/83
A2405XT-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	1500	78/82
A2409XT-1WR3	1W		±9V/±56mA		77/83
A2412XT-1WR3	1W		±12V/±42mA		77/83
A2415XT-1WR3	1W		±15V/±34mA		77/83
A2424XT-1WR3	1W		±24V/±21mA		79/85

B_XT-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B0503XT-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	1500	70/74
B0505XT-1WR3	1W		5V/200mA		78/82
B0509XT-1WR3	1W		9V/111mA		79/83
B0512XT-1WR3	1W		12V/84mA		79/83
B0515XT-1WR3	1W		15V/67mA		79/83
B0524XT-1WR3	1W		24V/42mA		81/85
B1205XT-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	1500	78/82
B1209XT-1WR3	1W		9V/111mA		79/83
B1212XT-1WR3	1W		12V/84mA		79/83
B1215XT-1WR3	1W		15V/67mA		79/83
B1224XT-1WR3	1W		24V/42mA		81/85
B1505XT-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	1500	78/82
B1515XT-1WR3	1W		15V/67mA		79/83
B2405XT-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	1500	76/82
B2409XT-1WR3	1W		9V/111mA		77/83
B2412XT-1WR3	1W		12V/84mA		77/83
B2415XT-1WR3	1W		15V/67mA		77/83
B2424XT-1WR3	1W		24V/42mA		79/85

FB0505XT-1WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
FB0505XT-1WR3	1W	4.5-5.5 (5VDC)	5V/200mA	4200	78/82

E_XT-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
E0505XT-1WR3	1W	4.5-5.5 (5VDC)	±5V/±100mA	3000	78/82
E0509XT-1WR3	1W		±9V/±56mA		79/83
E0512XT-1WR3	1W		±12V/±42mA		79/83
E0515XT-1WR3	1W		±15V/±34mA		79/83
E0524XT-1WR3	1W		±24V/±21mA		81/85
E1205XT-1WR3	1W	10.8-13.2 (12VDC)	±5V/±100mA	3000	78/82
E1209XT-1WR3	1W		±9V/±56mA		79/83
E1212XT-1WR3	1W		±12V/±42mA		79/83
E1215XT-1WR3	1W		±15V/±34mA		79/83
E1224XT-1WR3	1W		±24V/±21mA		81/85
E1515XT-1WR3	1W	13.5-16.5 (15VDC)	±15V/±34mA	3000	79/83
E2405XT-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	3000	76/82
E2409XT-1WR3	1W		±9V/±56mA		77/83
E2412XT-1WR3	1W		±12V/±42mA		77/83
E2415XT-1WR3	1W		±15V/±34mA		77/83
E2424XT-1WR3	1W		±24V/±21mA		79/85

F_XT-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F0503XT-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	3000	70/74
F0505XT-1WR3	1W		5V/200mA		78/82
F0509XT-1WR3	1W		9V/111mA		79/83
F0512XT-1WR3	1W		12V/84mA		79/83
F0515XT-1WR3	1W		15V/67mA		79/83
F0524XT-1WR3	1W		24V/42mA		81/85
F1205XT-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	3000	78/82
F1209XT-1WR3	1W		9V/111mA		79/83
F1212XT-1WR3	1W		12V/84mA		79/83
F1215XT-1WR3	1W		15V/67mA		79/83
F1224XT-1WR3	1W		24V/42mA		81/85
F1505XT-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	3000	78/82
F1515XT-1WR3	1W		15V/67mA		79/83
F2405XT-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	3000	76/82
F2409XT-1WR3	1W		9V/111mA		77/83
F2412XT-1WR3	1W		12V/84mA		77/83
F2415XT-1WR3	1W		15V/67mA		77/83
F2424XT-1WR3	1W		24V/42mA		79/85

B_XT-2WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B1205XT-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	1500	79/83
B1212XT-2WR3	2W		12V/167mA		80/84
B1215XT-2WR3	2W		15V/133mA		80/84
B1224XT-2WR3	2W		24V/83mA		81/85
B2405XT-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	1500	77/83
B2412XT-2WR3	2W		12V/167mA		78/84
B2415XT-2WR3	2W		15V/133mA		78/84
B2424XT-2WR3	2W		24V/83mA		79/85

F_XT-2WR3

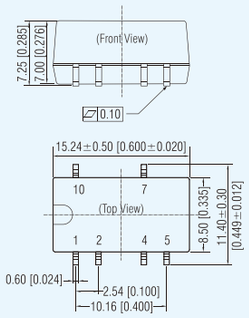
RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F1205XT-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	3000	79/83
F1212XT-2WR3	2W		12V/167mA		80/84
F1215XT-2WR3	2W		15V/133mA		80/84
F1224XT-2WR3	2W		24V/83mA		81/85
F2405XT-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	3000	77/83
F2412XT-2WR3	2W		12V/167mA		78/84
F2415XT-2WR3	2W		15V/133mA		78/84
F2424XT-2WR3	2W		24V/83mA		79/85

Package Dimension

① A_XT-1WR3/E_XT-1WR3/FB0505XT-1WR3 Series: LxWxH: 15.24 × 11.40 × 7.25(mm)



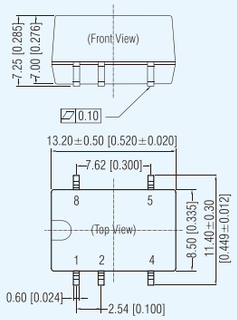
Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	-Vo
7	+Vo
10	NC

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

② B_XT-1WR3/F_XT-1WR3 Series: LxWxH: 13.20 × 11.40 × 7.25(mm)



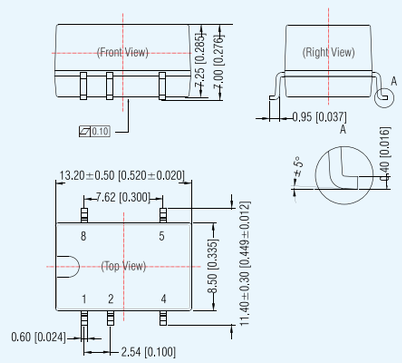
Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	+Vo
8	NC

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

③ B_XT-2WR3/F_XT-2WR3 Series: LxWxH: 13.20 × 11.40 × 7.25(mm)



Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	+Vo
8	NC

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

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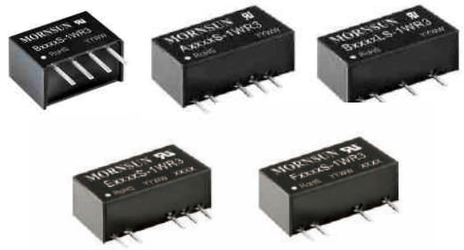
• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Fixed Input Voltage 1W SIP Package, Isolated & Unregulated Output Series

Features:

- Isolation voltage 1500VDC/3000VDC
- Continuous short-circuit protection
- No-load input current as low as 5mA
- ESD Immunity is up to ±8kV
- Operating temperature: -40℃ to +105℃
- Efficiency up to 83%
- Compact SIP package
- International standard pin-out
- IEC/EN/UL60950, UL/EN62368 approved



A_S-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
A1203S-1WR3	1W	12 (10.8-13.2)	±3.3V/±152mA	1500	71/75
A1205S-1WR3	1W		±5V/±100mA		76/80
A1212S-1WR3	1W		±12V/±425mA		77/81
A1215S-1WR3	1W		±15V/±34mA		77/81
A1224S-1WR3	1W		±24V/±21mA		76/80
A1505S-1WR3	1W	15 (13.5-16.5)	±5V/±100mA	1500	76/80
A1512S-1WR3	1W		±12V/±42mA		76/80
A1515S-1WR3	1W		±15V/±344mA		77/81
A2405S-1WR3	1W	24 (21.6-26.4)	±5V/±100mA	1500	74/80
A2412S-1WR3	1W		±12V/±425mA		75/81
A2415S-1WR3	1W		±15V/±34mA		73/79
A2424S-1WR3	1W		±24V/±21mA		74/80

B_LS-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B1203LS-1WR3	1W	12 (10.8-13.2)	3.3V/303mA	1500	71/75
B1205LS-1WR3	1W		5V/200mA		76/80
B1209LS-1WR3	1W		9V/111mA		76/80
B1212LS-1WR3	1W		12V/83mA		76/80
B1215LS-1WR3	1W		15V/67mA		77/81
B1224LS-1WR3	1W		24V/42mA		77/81
B1505LS-1WR3	1W	15 (13.5-16.5)	5V/200mA	1500	76/80
B1509LS-1WR3	1W		9V/111mA		76/80
B1512LS-1WR3	1W		12V/83mA		76/80
B1515LS-1WR3	1W		15V/67mA		77/81
B2403LS-1WR3	1W	24 (21.6-26.4)	3.3V/303mA	1500	69/75
B2405LS-1WR3	1W		5V/200mA		73/79
B2409LS-1WR3	1W		9V/111mA		74/80
B2412LS-1WR3	1W		12V/83mA		75/81
B2415LS-1WR3	1W		15V/67mA		75/81
B2424LS-1WR3	1W		24V/42mA		75/81

B_S-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B0503S-1WR3	1W	5 (4.5-5.5)	3.3V/303mA	1500	70/74
B0505S-1WR3	1W		5V/200mA		78/82
B0509S-1WR3	1W		9V/111mA		79/83
B0512S-1WR3	1W		12V/84mA		79/83
B0515S-1WR3	1W		15V/67mA		79/83
B0524S-1WR3	1W		24V/42mA		81/85
B1203S-1WR3	1W	12 (10.8-13.2)	3.3V/303mA	1500	71/75
B1205S-1WR3	1W		5V/200mA		76/80
B1209S-1WR3	1W		9V/111mA		76/80
B1212S-1WR3	1W		12V/83mA		76/80
B1215S-1WR3	1W		15V/67mA		77/81
B1224S-1WR3	1W		24V/42mA		77/81
B1505S-1WR3	1W	15 (13.5-16.5)	5V/200mA	1500	76/80
B1509S-1WR3	1W		9V/111mA		76/80
B1512S-1WR3	1W		12V/83mA		76/80
B1515S-1WR3	1W		15V/67mA		77/81
B2403S-1WR3	1W	24 (21.6-26.4)	3.3V/303mA	1500	69/75
B2405S-1WR3	1W		5V/200mA		73/79
B2409S-1WR3	1W		9V/111mA		74/80
B2412S-1WR3	1W		12V/83mA		75/81
B2415S-1WR3	1W		15V/67mA		75/81
B2424S-1WR3	1W		24V/42mA		75/81

E_S-1WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
E1203S-1WR3	1W	12 (10.8-13.2)	±3.3V/±152mA	3000	71/75
E1205S-1WR3	1W		±5V/±100mA		76/80
E1212S-1WR3	1W		±12V/±42mA		77/81
E1215S-1WR3	1W		±15V/±34mA		77/81
E1224S-1WR3	1W		±24V/±21mA		76/80
E1505S-1WR3	1W	15 (13.5-16.5)	±5V/±100mA	3000	76/80
E1512S-1WR3	1W		±12V/±42mA		76/80
E1515S-1WR3	1W		±15V/±34mA		77/81
E2405S-1WR3	1W	24 (21.6-26.4)	±5V/±100mA	3000	74/80
E2412S-1WR3	1W		±12V/±42mA		75/81
E2415S-1WR3	1W		±15V/±34mA		73/79
E2424S-1WR3	1W		±24V/±21mA		74/80

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

DC/DC Converter

F_S-1WR3

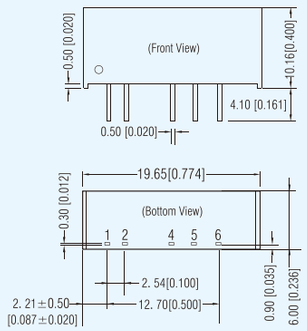
RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F1203S-1WR3	1W	12 (10.8-13.2)	3.3V/303mA	3000	71/75
F1205S-1WR3	1W		5V/200mA		76/80
F1209S-1WR3	1W		9V/111mA		76/80
F1212S-1WR3	1W		12V/83mA		76/80
F1215S-1WR3	1W		15V/67mA		77/81
F1224S-1WR3	1W		24V/42mA		77/81
F1505S-1WR3	1W	15 (13.5-16.5)	5V/200mA	3000	76/80
F1509S-1WR3	1W		9V/111mA		76/80
F1512S-1WR3	1W		12V/83mA		76/80
F1515S-1WR3	1W		15V/67mA		77/81
F2403S-1WR3	1W	24 (21.6-26.4)	3.3V/303mA	3000	69/75
F2405S-1WR3	1W		5V/200mA		73/79
F2409S-1WR3	1W		9V/111mA		74/80
F2412S-1WR3	1W		12V/83mA		75/81
F2415S-1WR3	1W		15V/67mA		75/81
F2424S-1WR3	1W		24V/42mA		75/81

Package Dimension

① A_S-1WR3/B_LS-1WR3 Series: LxWxH: 19.65 × 6.00 × 10.16(mm)

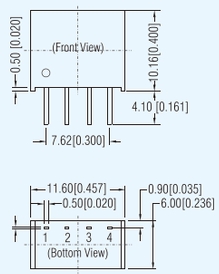


Pin-Out

Pin	Single	Dual
1	Vin	Vin
2	GND	GND
4	0V	-Vo
5	No Pin	0V
6	+Vo	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

② B_S-1WR3 Series: LxWxH: 11.60 × 6.00 × 10.16(mm)

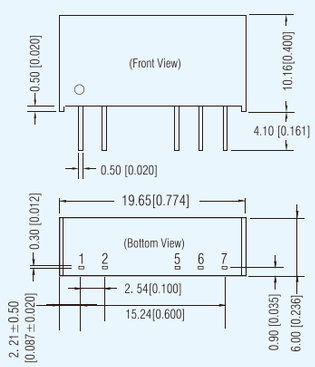


Pin-Out

Pin	Function
1	GND
2	Vin
3	0V
4	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

③ E_S-1WR3/F_S-1WR3 Series: LxWxH: 19.65 × 6.00 × 10.16(mm)



Pin-Out

Pin	Single	Dual
1	Vin	Vin
2	GND	GND
5	0V	-Vo
6	No Pin	0V
7	+Vo	+Vo

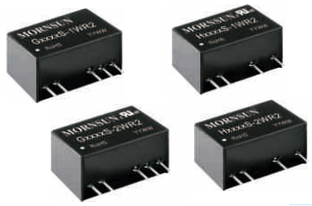
Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Fixed Input Voltage 1-2W SIP Package, Isolated & Unregulated Output Series

Features:

- IEC60950, EN60601-1, ANSI/AAMI ES60601-1approval (3rd edition, 1xMOPP/2xMOOP)
- Isolation voltage: 4200VAC or 6000VDC (Reinforced insulation)
- Operating temperature: -40℃ to +85℃
- Efficiency up to 84%
- International standard pin-out



G_S-1WR2

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
G0505S-1WR2	1W	4.5-5.5 (5VDC)	±5V/±100mA	6000	74/78
G0509S-1WR2	1W		±9V/±56mA		76/80
G0512S-1WR2	1W		±12V/±42mA		70/74
G0515S-1WR2	1W		±15V/±34mA		72/76
G1205S-1WR2	1W	10.8-13.2 (12VDC)	±5V/±100mA	6000	73/77
G1209S-1WR2	1W		±9V/±56mA		76/80
G1212S-1WR2	1W		±12V/±42mA		69/73
G1215S-1WR2	1W		±15V/±34mA		71/75
G1515S-1WR2	1W	13.5-16.5 (15VDC)	±15V/±34mA	6000	68/72
G2405S-1WR2	1W	21.6-26.4 (24VDC)	±5V/±100mA	6000	71/75
G2409S-1WR2	1W		±9V/±56mA		75/79
G2412S-1WR2	1W		±12V/±42mA		72/76
G2415S-1WR2	1W		±15V/±34mA		72/76

H_S-1WR2

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
H0305S-1WR2	1W	3.3 (2.97-3.63)	5V/200mA	6000	67/71
H0503S-1WR2	1W	4.5-5.5 (5VDC)	3.3V/303mA	6000	69/73
H0505S-1WR2	1W		5V/200mA		74/78
H0512S-1WR2	1W		12V/84mA		72/76
H0515S-1WR2	1W		15V/67mA		72/76
H1205S-1WR2	1W	10.8-13.2 (12VDC)	5V/200mA	6000	73/77
H1212S-1WR2	1W		12V/84mA		77/81
H1215S-1WR2	1W		15V/67mA		77/81
H2405S-1WR2	1W	21.6-26.4 (24VDC)	5V/200mA	6000	72/76
H2412S-1WR2	1W		12V/84mA		74/78
H2415S-1WR2	1W		15V/67mA		74/78

H_S-2WR2

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
H0505S-2WR2	2W	4.5-5.5 (5VDC)	5V/400mA	6000	73/77
H0512S-2WR2	2W		12V/167mA		75/79
H0515S-2WR2	2W		15V/133mA		75/79
H1205S-2WR2	2W	10.8-13.2 (12VDC)	5V/400mA	6000	72/76
H1212S-2WR2	2W		12V/167mA		75/79
H1215S-2WR2	2W		15V/133mA		77/81
H1505S-2WR2	2W	13.5-16.5 (15VDC)	5V/400mA	6000	73/77
H1515S-2WR2	2W		15V/133mA		78/82
H2405S-2WR2	2W	21.6-26.4 (24VDC)	5V/400mA	6000	75/79
H2412S-2WR2	2W		12V/167mA		78/82
H2415S-2WR2	2W		15V/133mA		80/84

G_S-2WR2

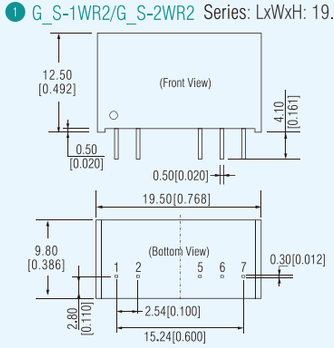
cULus RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
G0505S-2WR2	2W	4.5-5.5 (5VDC)	±5V/±200mA	6000	74/78
G0509S-2WR2	2W		±9V/±111mA		74/78
G0512S-2WR2	2W		±12V/±83mA		74/78
G0515S-2WR2	2W		±15V/±67mA		76/80
G1205S-2WR2	2W	10.8-13.2 (12VDC)	±5V/±200mA	6000	70/74
G1209S-2WR2	2W		±9V/±111mA		76/80
G1212S-2WR2	2W		±12V/±83mA		76/80
G1215S-2WR2	2W		±15V/±67mA		73/77
G1505S-2WR2	2W	13.5-16.5 (15VDC)	±5V/±200mA	6000	73/77
G1509S-2WR2	2W		±9V/±111mA		76/80
G1515S-2WR2	2W		±15V/±67mA		69/73
G2405S-2WR2	2W	21.6-26.4 (24VDC)	±5V/±200mA	6000	75/79
G2409S-2WR2	2W		±9V/±111mA		77/81
G2412S-2WR2	2W		±12V/±83mA		78/82
G2415S-2WR2	2W		±15V/±67mA		77/81

Package Dimension

1 G_S-1WR2/G_S-2WR2 Series: LxWxH: 19.50×9.80×12.50(mm)

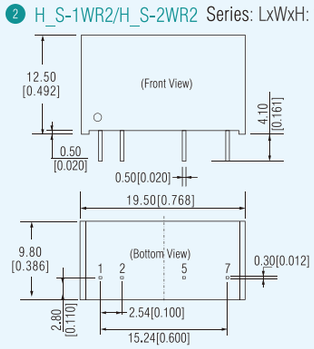


Pin-Out

Pin	Dual
1	Vin
2	GND
5	-Vo
6	0V
7	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

2 H_S-1WR2/H_S-2WR2 Series: LxWxH: 19.50×9.80×12.50(mm)



Pin-Out

Pin	Single
1	Vin
2	GND
5	0V
7	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

Fixed Input Voltage 2-3W SIP Package, Isolated & Unregulated Output Series

Features:

- Continuous short-circuit protection
- Operating temperature: -40℃ to +105℃ (A/B/E/F-2WR3 series)
- International standard pin-out
- IEC/UL/EN62368 approved
- High power density

A_S-2WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
A1203S-2WR3	2W	10.8-13.2 (12VDC)	±3.3V/±303mA	1500	71/75
A1205S-2WR3	2W		±5V/±200mA		76/80
A1212S-2WR3	2W		±12V/±83mA		79/83
A1215S-2WR3	2W		±15V/±67mA		79/83
A2405S-2WR3	2W	21.6-26.4 (24VDC)	±5V/±200mA	1500	74/80
A2412S-2WR3	2W		±12V/±83mA		77/83
A2415S-2WR3	2W		±15V/±67mA		77/83

E_S-2WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
E1203S-2WR3	2W	10.8-13.2 (12VDC)	±3.3V/±303mA	3000	71/75
E1205S-2WR3	2W		±5V/±200mA		76/80
E1212S-2WR3	2W		±12V/±83mA		79/83
E1215S-2WR3	2W		±15V/±67mA		79/83
E2405S-2WR3	2W	21.6-26.4 (24VDC)	±5V/±200mA	3000	74/80
E2412S-2WR3	2W		±12V/±83mA		77/83
E2415S-2WR3	2W		±15V/±67mA		77/83

F_S-3WR2

cULus CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F0505S-3WR2	3W	4.5-5.5 (5VDC)	5V/600mA	3000	80/84
F0509S-3WR2	3W		9V/333mA		80/84
F1205S-3WR2	3W	10.8-13.2 (12VDC)	5V/600mA	3000	77/81
F1212S-3WR2	3W		12V/250mA		84/88
F1515S-3WR2	3W	13.5-16.5 (15VDC)	15V/200mA	3000	81/85

B_S-2WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B1205S-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	1500	78/82
B1212S-2WR3	2W		12V/167mA		80/84
B1215S-2WR3	2W		15V/133mA		81/85
B1224S-2WR3	2W		24V/83mA		82/86
B2405S-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	1500	74/80
B2412S-2WR3	2W		12V/167mA		78/84
B2415S-2WR3	2W		15V/133mA		80/86
B2424S-2WR3	2W		24V/83mA		80/86

F_S-2WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F1205S-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	3000	78/82
F1212S-2WR3	2W		12V/167mA		80/84
F1215S-2WR3	2W		15V/133mA		81/85
F1224S-2WR3	2W		24V/83mA		82/86
F2405S-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	3000	74/80
F2412S-2WR3	2W		12V/167mA		78/84
F2415S-2WR3	2W		15V/133mA		80/86
F2424S-2WR3	2W		24V/83mA		80/86

B_S-3WR2

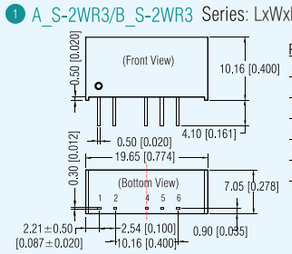
cULus CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B0505S-3WR2	3W	4.5-5.5 (5VDC)	5V/600mA	1500	80/84
B0509S-3WR2	3W		9V/333mA		80/84
B1212S-3WR2	3W	10.8-13.2 (12VDC)	12V/250mA	1500	84/88

Package Dimension

1 A_S-2WR3/B_S-2WR3 Series: LxWxH: 19.50×7.05×10.16(mm)

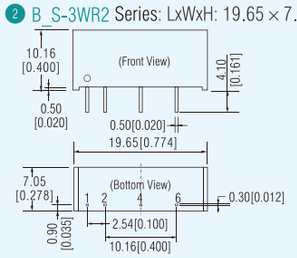


Pin-Out

Pin	Single	Dual
1	Vin	Vin
2	GND	GND
4	0V	-Vo
5	No Pin	0V
6	+Vo	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

2 B_S-3WR2 Series: LxWxH: 19.65×7.05×10.16(mm)

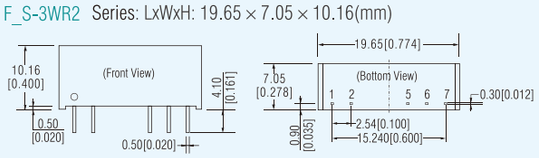


Pin-Out

Pin	Function
1	Vin
2	GND
4	0V
6	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

3 F_S-3WR2 Series: LxWxH: 19.65×7.05×10.16(mm)



Pin-Out

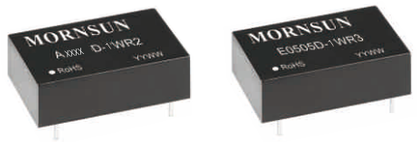
Pin	F_S-3WR2
1	Vin
2	GND
5	0V
6	No Pin
7	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

Fixed Input Voltage 1W DIP Package, Isolated & Unregulated Output Series

Features:

- ESD Immunity is up to ±8kV
- Continuous output short-circuit protection
- No-load input current as low as 5mA
- Operating temperature: -40℃ to +105℃
- Isolation voltage 3000VDC
- Efficiency up to 83%
- International standard pin-out
- DIP package
- IEC/UL/EN62368 approved



A_D-1WR2

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
A0505D-1WR2	1W	4.5-5.5 (5VDC)	±5V/±100mA	1500	76/80
A0509D-1WR2	1W		±9V/±56mA		76/80
A0512D-1WR2	1W		±12V/±42mA		76/80
A0515D-1WR2	1W		±15V/±34mA		77/81
A0524D-1WR2	1W		±24V/±21mA		76/80
A1205D-1WR2	1W	10.8-13.2 (12VDC)	±5V/±100mA	1500	76/80
A1212D-1WR2	1W		±12V/±42mA		76/80
A1224D-1WR2	1W		±24V/±21mA		77/81
A1524D-1WR2	1W	13.5-16.5 (15VDC)	±24V/±21mA	1500	77/81
A2409D-1WR2	1W	21.6-26.4 (24VDC)	±9V/±56mA	1500	76/80
A2412D-1WR2	1W		±12V/±42mA		76/80
A2415D-1WR2	1W		±15V/±34mA		76/80

B_D-1WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B1203D-1WR3	1W	12 (10.8-13.2)	3.3V/303mA	1500	71/75
B1205D-1WR3	1W		5V/200mA		76/80
B1209D-1WR3	1W		9V/111mA		74/78
B1212D-1WR3	1W		12V/83mA		76/80
B1215D-1WR3	1W		15V/67mA		77/81
B1224D-1WR3	1W		24V/42mA		77/81
B1505D-1WR3	1W	15 (13.5-16.5)	5V/200mA	1500	76/80
B1509D-1WR3	1W		9V/111mA		76/80
B1515D-1WR3	1W		15V/67mA		77/81
B2403D-1WR3	1W	24 (21.6-26.4)	3.3V/303mA	1500	69/75
B2405D-1WR3	1W		5V/200mA		73/79
B2409D-1WR3	1W		9V/111mA		74/80
B2412D-1WR3	1W		12V/83mA		75/81
B2415D-1WR3	1W		15V/67mA		75/81
B2424D-1WR3	1W		24V/42mA		75/81

E_D-1WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
E0505D-1WR3	1W	4.5-5.5 (5VDC)	±5V/±100mA	3000	72/82
E0509D-1WR3	1W		±9V/±56mA		80/84
E0512D-1WR3	1W		±12V/±42mA		80/84
E0515D-1WR3	1W		±15V/±34mA		80/84
E1205D-1WR3	1W	10.8-13.2 (12VDC)	±5V/±100mA	3000	76/80
E1209D-1WR3	1W		±9V/±55mA		76/80
E1212D-1WR3	1W		±12V/±42mA		77/81
E1215D-1WR3	1W		±15V/±34mA		77/81
E1515D-1WR3	1W	13.5-16.5 (15VDC)	±15V/±33mA	3000	77/81
E2405D-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	3000	74/80
E2409D-1WR3	1W		±9V/±55mA		74/80
E2412D-1WR3	1W		±12V/±42mA		75/81
E2415D-1WR3	1W		±15V/±34mA		73/79

F_D-1WR2

cULus CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F0503D-1WR2	1W	4.5-5.5 (5VDC)	3.3V/303mA	3000	71/75
F0505D-1WR2	1W		5V/200mA		76/80
F0512D-1WR2	1W		12V/83mA		76/80
F0515D-1WR2	1W		15V/67mA		77/81
F1205D-1WR2	1W	10.8-13.2 (12VDC)	5V/200mA	3000	76/80
F1212D-1WR2	1W		12V/83mA		76/80
F1215D-1WR2	1W		15V/67mA		77/81
F1515D-1WR2	1W	13.5-16.5 (15VDC)	15V/67mA	3000	76/80
F2405D-1WR2	1W	21.6-26.4 (24VDC)	5V/200mA	3000	75/79
F2412D-1WR2	1W		12V/±42mA		77/81
F2415D-1WR2	1W		15V/±34mA		76/80

F_N-1WR3

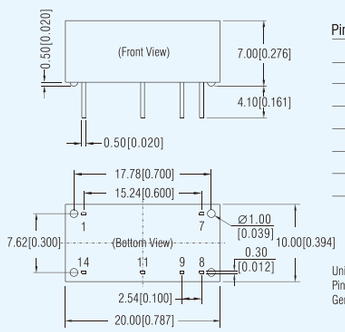
cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F0503N-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	3000	70/74
F0505N-1WR3	1W		5V/200mA		78/82
F0507N-1WR3	1W		7.2V/139mA		76/80
F0509N-1WR3	1W		9V/111mA		79/83
F0512N-1WR3	1W		12V/84mA		79/83
F0515N-1WR3	1W		15V/67mA		79/83
F0524N-1WR3	1W		24V/42mA		81/65
F1203N-1WR3	1W	13.5-16.5 (15VDC)	3.3V/303mA	3000	71/75
F1205N-1WR3	1W		5V/200mA		76/80
F1209N-1WR3	1W		9V/111mA		74/78
F1212N-1WR3	1W		12V/83mA		76/80
F1215N-1WR3	1W		15V/67mA		77/81
F1224N-1WR3	1W		24V/42mA		77/81
F2403N-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	3000	69/75
F2405N-1WR3	1W		5V/200mA		73/79
F2409N-1WR3	1W		9V/111mA		74/80
F2412N-1WR3	1W		12V/83mA		75/81
F2415N-1WR3	1W		15V/67mA		75/81
F2424N-1WR3	1W		24V/42mA		75/81

Package Dimension

1 A_D-1WR2 Series: LxWxH: 20.00 × 10.00 × 7.00(mm)



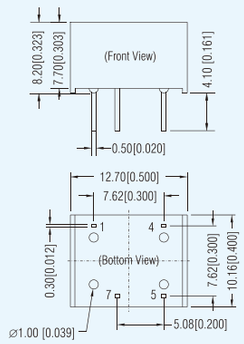
Pin-Out

Pin	Function
1	GND
7	NC
8	0V
9	+Vo
11	-Vo
14	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

2 B_D-1WR3 Series: LxWxH: 12.70 × 10.16 × 8.20(mm)

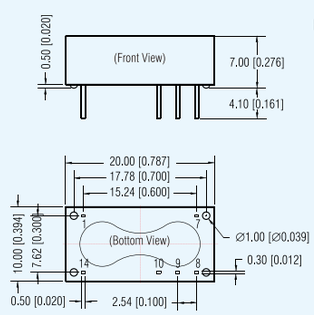


Pin-Out

Pin	Function
1	GND
4	Vin
5	+Vo
7	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

3 E_D-1WR3/F_D-1WR2 Series: LxWxH: 20.00 × 10.00 × 7.00(mm)



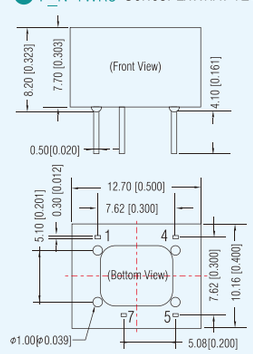
Pin-Out

Pin	Dual
1	GND
7	NC
8	-Vo
9	0V
10	+Vo
14	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

4 F_N-1WR3 Series: LxWxH: 12.70 × 10.16 × 8.20(mm)



Pin-Out

Pin	Function
1	GND
4	Vin
5	+Vo
7	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

DC/DC Converter

Fixed Input Voltage 2W DIP Package, Isolated & Unregulated Output Series

Features:

- ESD Immunity is up to ±8kV
- Operating temperature: -40℃ to +85℃
- Efficiency up to 85%
- Continuous output short-circuit protection
- Compact DIP package
- IEC/UL/EN62368 approved

A_D-2WR2

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
A0505D-2WR2	2W	5	±5V/200mA	1500	76/80
A0509D-2WR2	2W		±9V/±111mA		80/84
A0512D-2WR2	2W		±12V/±83mA		80/84
A0515D-2WR2	2W		±15V/±67mA		80/84
A1205D-2WR2	2W	12	±5V/200mA	1500	76/80
A1209D-2WR2	2W		±9V/±111mA		79/83
A1212D-2WR2	2W		±12V/±83mA		78/82
A1215D-2WR2	2W		±15V/±67mA		80/84
A1515D-2WR2	2W	15	±15V/±67mA	1500	77/81
A2405D-2WR2	2W	24	±5V/200mA	1500	75/79
A2409D-2WR2	2W		±9V/±111mA		80/84
A2412D-2WR2	2W		±12V/±83mA		79/83
A2415D-2WR2	2W		±15V/±67mA		80/84
A2424D-2WR2	2W		±24V/±42mA		80/84

F_D-2WR2

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
F0505D-2WR2	2W	5	5V/400mA	3000	76/80
F0509D-2WR2	2W		9V/222mA		80/84
F0512D-2WR2	2W		12V/167mA		80/84
F0515D-2WR2	2W		15V/133mA		80/84
F0524D-2WR2	2W		24V/83mA		80/84
F1205D-2WR2	2W	12	5V/400mA	3000	76/80
F1212D-2WR2	2W		12V/167mA		78/82
F1215D-2WR2	2W		15V/133mA		80/84
F1224D-2WR2	2W		24V/83mA		81/85
F1505D-2WR2	2W	15	5V/400mA	3000	75/79
F1509D-2WR2	2W		9V/222mA		78/82
F1515D-2WR2	2W		15V/133mA		75/79
F2405D-2WR2	2W	24	5V/400mA	3000	76/80
F2409D-2WR2	2W		9V/222mA		81/85
F2412D-2WR2	2W		12V/167mA		79/83
F2415D-2WR2	2W		15V/133mA		80/84
F2424D-2WR2	2W		24V/83mA		81/85

B_D-2WR2

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
B0303D-2WR2	2W	3.3	3.3V/400mA	1500	66/70
B0305D-2WR2	2W		5V/400mA		74/78
B0503D-2WR2	2W	5	3.3V/400mA	1500	70/74
B0505D-2WR2	2W		5V/400mA		76/80
B0509D-2WR2	2W		9V/222mA		80/84
B0512D-2WR2	2W		12V/167mA		80/84
B0515D-2WR2	2W		15V/133mA		80/84
B0524D-2WR2	2W		24V/83mA		80/84
B0915D-2WR2	2W	9	15V/133mA	1500	79/83
B1205D-2WR2	2W	12	5V/400mA	1500	76/80
B1209D-2WR2	2W		9V/222mA		79/83
B1212D-2WR2	2W		12V/167mA		78/82
B1215D-2WR2	2W		15V/133mA		80/84
B1224D-2WR2	2W		24V/83mA		80/84
B2405D-2WR2	2W	24	5V/400mA	1500	75/79
B2409D-2WR2	2W		9V/222mA		81/85
B2412D-2WR2	2W		12V/167mA		79/83
B2415D-2WR2	2W		15V/133mA		80/84
B2424D-2WR2	2W		24V/83mA		80/84

E_D-2WR3

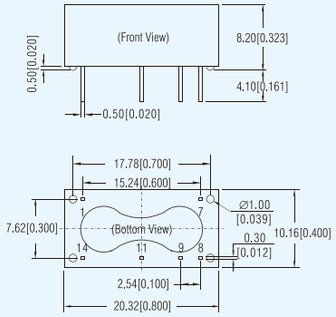
RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
E1203D-2WR3	2W	12	±3.3V/±303mA	3000	71/75
E1205D-2WR3	2W		±5V/±200mA		76/80
E1212D-2WR3	2W		±12V/±83mA		79/83
E1215D-2WR3	2W		±15V/±67mA		79/83
E2403D-2WR3	2W	24	±3.3V/	3000	74/80
E2405D-2WR3	2W		±5V/±200mA		
E2412D-2WR3	2W		±12V/		
E2415D-2WR3	2W		±15V/±67mA		77/83

Package Dimension

1 A_D-2WR2/B_D-2WR2 Series: LxWxH: 20.32×10.16×8.20(mm)



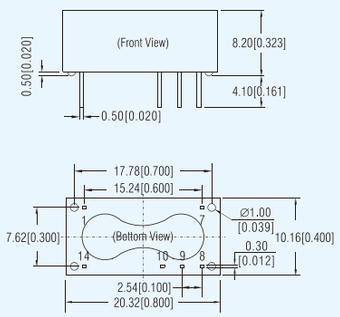
Pin-Out

Pin	Single	Dual
1	GND	GND
7	NC	NC
8	0V	0V
9	+Vo	+Vo
11	No Pin	-Vo
14	Vin	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

2 E_D-2WR3/F_D-2WR2 Series: LxWxH: 20.32×10.16×8.20(mm)



Pin-Out

Pin	Single	Dual
1	GND	GND
7	NC	NC
8	+Vo	+Vo
9	No Pin	0V
10	0V	-Vo
14	Vin	Vin

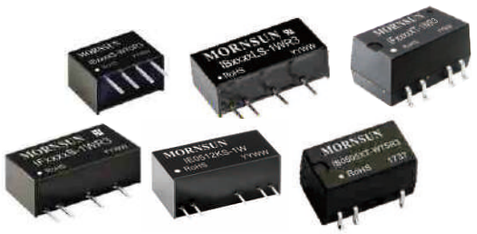
NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

Fixed Input Voltage 0.75-1W Isolated & Regulated Output Series

Features:

- Isolation voltage 3000VDC
- Continuous output short-circuit protection
- No-load input current as low as 5mA
- Operating temperature: -40℃ to +85℃
- Efficiency up to 74%
- International standard pin-out
- Compact SIP and SMD package
- IEC/UL/EN62368 approved



IB_XT-W75R3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IB0503XT-W75R3	0.75W	4.5-5.5 (5VDC)	3.3V/200mA	1500	64/68
IB0505XT-W75R3	0.75W		5V/150mA		68/72
IB0509XT-W75R3	0.75W		9V/83mA		68/72
IB0512XT-W75R3	0.75W		12V/62mA		69/73
IB0515XT-W75R3	0.75W		15V/50mA		70/74
IB1205XT-W75R3	0.75W	11.8-12.6 (12VDC)	5V/150mA	1500	68/72
IB1212XT-W75R3	0.75W		12V/62mA		69/73
IB1215XT-W75R3	0.75W		15V/50mA		70/74

IB_XT-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IB0503XT-1WR2	1W	4.5-5.5 (5VDC)	3.3V/243mA	1500	54/58
IB0505XT-1WR2	1W		5V/200mA		68/72
IB0512XT-1WR2	1W		12V/84mA		69/73
IB0515XT-1WR2	1W		15V/67mA		70/74
IB1205XT-1WR2	1W	13.5-16.5 (15VDC)	5V/200mA	1500	69/73
IB1212XT-1WR2	1W		12V/84mA		69/73
IB1215XT-1WR2	1W		15V/67mA		71/75
IB2405XT-1WR2	1W	21.6-26.4 (24VDC)	5V/200mA	1500	69/73
IB2412XT-1WR2	1W		12V/84mA		69/73
IB2415XT-1WR2	1W		15V/67mA		69/73

IF_XT-1WR3

CE

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IF0503XT-1WR3	1W	4.5-5.5 (5VDC)	3.3V/250mA	3000	62/66
IF0505XT-1WR3	1W		5V/200mA		65/69
IF0509XT-1WR3	1W		9V/111mA		66/70
IF0512XT-1WR3	1W		12V/84mA		66/71
IF0515XT-1WR3	1W		15V/67mA		66/71
IF1205XT-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	3000	65/69
IF1212XT-1WR3	1W		12V/84mA		67/71
IF1215XT-1WR3	1W		15V/67mA		67/71
IF2405XT-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	3000	63/69
IF2412XT-1WR3	1W		12V/84mA		65/71
IF2415XT-1WR3	1W		15V/67mA		65/71

IB_S-W75R3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IB0503S-W75R3	0.75W	4.5-5.5 (5VDC)	3.3V/200mA	1500	64/68
IB0505S-W75R3	0.75W		5V/150mA		68/72
IB0509S-W75R3	0.75W		9V/83mA		68/72
IB0512S-W75R3	0.75W		12V/62mA		69/73
IB0515S-W75R3	0.75W		15V/50mA		70/74
IB1203S-W75R3	0.75W	10.8-13.2 (12VDC)	3.3V/200mA	1500	64/68
IB1205S-W75R3	0.75W		5V/150mA		68/72
IB1212S-W75R3	0.75W		12V/62mA		69/73
IB1215S-W75R3	0.75W		15V/50mA		70/74
IB2403S-W75R3	0.75W	21.6-26.4 (24VDC)	3.3V/200mA	1500	62/68
IB2405S-W75R3	0.75W		5V/150mA		66/72
IB2412S-W75R3	0.75W		12V/62mA		67/73
IB2415S-W75R3	0.75W		15V/50mA		68/74

IB_LS-1WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IB0503LS-1WR3	1W	4.5-5.5 (5VDC)	3.3V/250mA	1500	63/67
IB0505LS-1WR3	1W		5V/200mA		66/70
IB0509LS-1WR3	1W		9V/111mA		67/71
IB0512LS-1WR3	1W		12V/84mA		68/72
IB0515LS-1WR3	1W		15V/67mA		69/73
IB0524LS-1WR3	1W		24V/41mA		69/73
IB1205LS-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	1500	69/73
IB1209LS-1WR3	1W		9V/111mA		69/73
IB1212LS-1WR3	1W		12V/83mA		69/73
IB1215LS-1WR3	1W		15V/67mA		71/75
IB1505LS-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	1500	69/73
IB1515LS-1WR3	1W		15V/67mA		71/75
IB2405LS-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	1500	67/73
IB2409LS-1WR3	1W		9V/111mA		67/73
IB2412LS-1WR3	1W		12V/83mA		67/73
IB2415LS-1WR3	1W		15V/67mA		67/73

IE_KS-1WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IE0505KS-1WR3	1W	4.5-5.5 (5VDC)	±5V/±100mA	3000	64/68
IE0509KS-1WR3	1W		±9V/±56mA		65/69
IE0512KS-1WR3	1W		±12V/±42mA		66/70
IE0515KS-1WR3	1W		±15V/±33mA		66/70

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

IF_S-1WR3

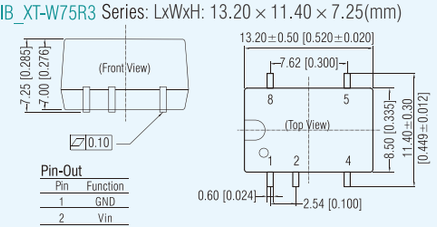
cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
IF0503S-1WR3	1W	4.5-5.5 (5VDC)	3.3V/250mA	3000	63/67
IF0505S-1WR3	1W		5V/200mA		66/70
IF0509S-1WR3	1W		9V/111mA		67/71
IF0512S-1WR3	1W		12V/84mA		68/72
IF0515S-1WR3	1W		15V/67mA		69/73
IF0524S-1WR3	1W		24V/41mA		69/73
IF1205S-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	3000	69/73
IF1209S-1WR3	1W		9V/111mA		69/73
IF1212S-1WR3	1W		12V/83mA		69/73
IF1215S-1WR3	1W		15V/67mA		71/75
IF1505S-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	3000	69/73
IF1515S-1WR3	1W		15V/67mA		71/75
IF2403S-1WR3	1W	21.6-26.4 (24VDC)	3.3V/250mA	3000	65/71
IF2405S-1WR3	1W		5V/200mA		67/73
IF2409S-1WR3	1W		9V/111mA		67/73
IF2412S-1WR3	1W		12V/83mA		67/73
IF2415S-1WR3	1W		15V/67mA		67/73

Package Dimension

1 IB_XT-W75R3 Series: LxWxH: 13.20 × 11.40 × 7.25(mm)



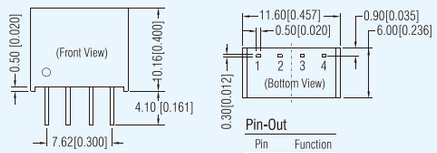
Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	+Vo
8	NC

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

2 IB_S-W75R3 Series: LxWxH: 11.60 × 6.00 × 10.16(mm)

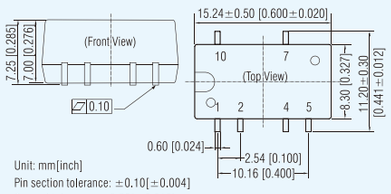


Pin-Out

Pin	Function
1	GND
2	Vin
3	0V
4	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

3 IB_XT-1WR2/IF_XT-1WR3 Series: LxWxH: 15.24 × 11.20 × 7.25(mm)



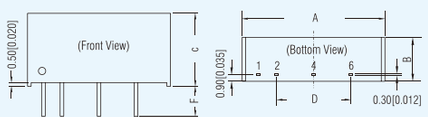
Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	0V
7	+Vo
10	NC

No:No connection

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

4 IB_LS-1WR3/IF_S-1WR3 Series: LxWxH: 19.65 × 6.00 × 10.16(mm)



Pin-Out

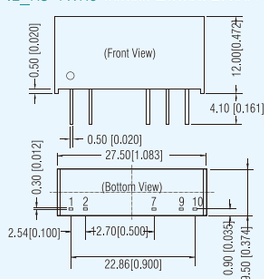
Pin	1	2	4	6
Function	Vin	GND	0V	+Vo

Outline & Dimensions

NO.	IB_LS-1WR3 IF_S-1WR3
A	19.65
B	6.00
C	10.16
D	10.16
E	2.54
F	4.10

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

5 IE_KS-1WR3 Series: LxWxH: 27.50 × 9.50 × 12.00(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
7	+Vo
9	−Vo
10	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

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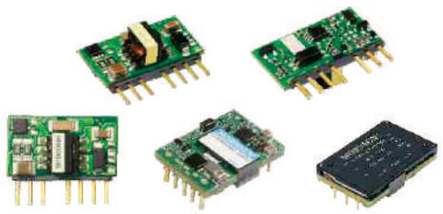
Wide Input Voltage 3-400W Open Frame Package, Cost-effective Isolated & Regulated Output Series

Features:

- Widely used in communication, medical, industrial control, electric power, instrumentation applications
- Wide 4:1 input voltage range
- Isolation voltage 1500VDC
- Efficiency up to 93%
- Input under-voltage protection, output short-circuit, over-current protection
- Operating temperature: -40℃ to +85℃ / -40℃ to +100℃
- International standard pin-out
- EN62368 approved



VCB_SO-3WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4805SO-3WR3	3W	36-75 (48VDC)	5V/600mA	1500	78/80
VCB4812SO-3WR3	3W		12V/250mA		79/81
VCB4815SO-3WR3	3W		15V/200mA		80/82
VCB4824SO-3WR3	3W		24V/125mA		80/82

VCB_SO-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4805SO-6WR3	6W	36-75 (48VDC)	5V/1200mA	1500	79/81
VCB4812SO-6WR3	6W		12V/500mA		81/83
VCB4815SO-6WR3	6W		15V/400mA		82/84
VCB4824SO-6WR3	6W		24V/250mA		83/85

VCB_SBO-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4805SBO-10WR3	10W	36-75 (48VDC)	5V/2000mA	1500	81/83
VCB4812SBO-10WR3	10W		12V/833mA		85/87
VCB4815SBO-10WR3	10W		15V/667mA		86/88
VCB4824SBO-10WR3	10W		24V/417mA		86/88

VCB_SBO-20WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4803SBO-20WR3	20W	36-75 (48VDC)	3.3V/5000mA	1500	84/86
VCB4805SBO-20WR3	20W		5V/4000mA		86/88
VCB4812SBO-20WR3	20W		12V/1667mA		87/89
VCB4815SBO-20WR3	20W		15V/1333mA		87/89
VCB4824SBO-20WR3	20W		24V/833mA		88/90
VCB4828SBO-20WR3	20W		28V/714mA		88/90

VCB_SBO-30WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4805SBO-30WR3	30W	36-75 (48VDC)	5V/6000mA	1500	88/90
VCB4812SBO-30WR3	30W		12V/2500mA		88/90
VCB4815SBO-30WR3	30W		15V/2000mA		88/90
VCB4824SBO-30WR3	30W		24V/1250mA		88/90
VCB4828SBO-30WR3	30W		28V/1072mA		88/90

VCB_EBO-100WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4805EBO-100WR3	100W	36-75 (48VDC)	5V/20A	1500	90/92
VCB4812EBO-100WR3	100W		12V/8.3A		91/93
VCB4815EBO-100WR3	100W		15V/6.67A		91/93
VCB4824EBO-100WR3	100W		24V/4.17A		90/92
VCB4828EBO-100WR3	100W		28V/3.57A		90/92

VCB_QBO-200WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCB4805QBO-200WR3	180W	36-75 (48VDC)	5V/36A	1500	89/91
VCB4812QBO-200WR3	200W		12V/16.67A		91/93
VCB4815QBO-200WR3	200W		15V/13.33A		91/93
VCB4824QBO-200WR3	200W		24V/8.33A		90/92

VCF_QBO-400W(F/H)R3

RoHS

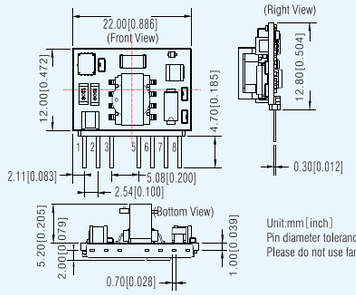
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VCF4812QBO-400W(F/H)R3	400W	36-75 (48VDC)	12V/33000mA	2250	93/95
VCF4815QBO-400W(F/H)R3	400W		15V/26500mA		93/95
VCF4824QBO-400W(F/H)R3	400W		24V/16500mA		93/95
VCF4828QBO-400W(F/H)R3	400W		28V/14200mA		93/95

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 VCB_SO-3WR3/VCB_SO-6WR3 Series: LxWxH: 22.00×8.20×12.80(mm)

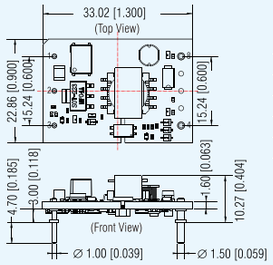


Pin-Out

Pin	Function
1	GND_IN
2	VIN
3	CTRL
5	NC
6	VO
7	GND_OUT
8	NC

Unit:mm[inch]
Pin diameter tolerance: ±0.25[±0.010]
Please do not use fan power other devices

2 VCB_SBO-10WR3 Series: LxWxH: 33.02×22.86×11.40(mm)

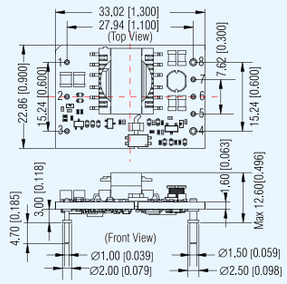


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
8	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

3 VCB_SBO-20WR3 Series: LxWxH: 33.02 × 22.86 × 9.18(mm)

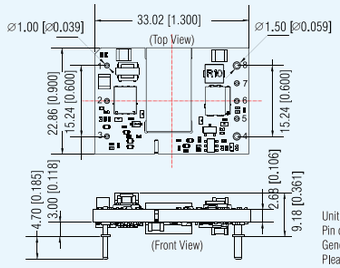


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Sense-
6	Trim
7	Sense+
8	+VO

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

4 VCB_SBO-30WR3 Series: LxWxH: 33.02 × 22.86 × 9.18(mm)

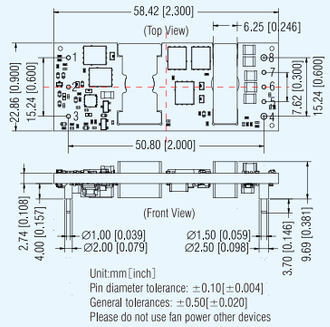


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Sense-
6	Trim
7	Sense+
8	+VO

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

5 VCB_EBO-100WR3 Series: LxWxH: 58.42 x 22.86 x 9.69(mm)

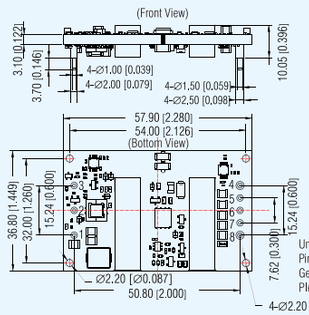


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND_IN
4	GND_OUT
5	-Sense
6	Trim
7	+Sense
8	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

6 VCB_QBO-200WR3 Series: LxWxH: 57.9 x 36.80 x 10.05(mm)

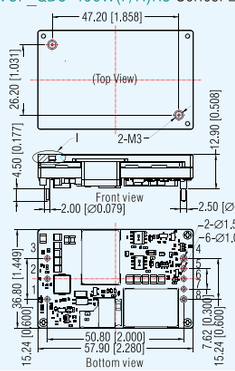


Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	-Vin
4	0V
5	Sense-
6	Trim
7	Sense+
8	+Vo

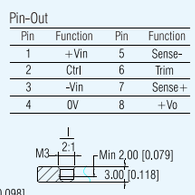
Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

7 VCF_QBO-400W(F/H)R3 Series: LxWxH: 57.9 x 36.8 x 12.9 (mm)



Pin-Out

Pin	Function	Pin	Function
1	+Vin	5	Sense-
2	Ctrl	6	Trim
3	-Vin	7	Sense+
4	0V	8	+Vo



Unit:mm[inch]
Pin 1,2,3,5,6, 7´s diameter:1.00[0.039]
Pin 4,8´s diameter: 1.50[0.059]
Pin diameter tolerance:±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m
Please do not use fan power other devices

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Wide Input Voltage 1-3W Ultra-thin SMD Package, Isolated & Regulated Output Series

Features:

- Suitable for communication, instrumentation, industrial electronics applications
- Ultra-small DIP/SMD package
- Wide 2:1 input voltage range
- Operating temperature: -40℃ to +85℃
- Isolation voltage 1500VDC
- Continuous output short-circuit protection
- Meet UL62368 standard, EN62368 approved

WRA_SD/T-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRA1205SD/ST-1WR2	1W	9-18 (12VDC)	±5V/±100mA	1500VDC (DIP/SMD)	75/77
WRA1209SD/ST-1WR2	1W		±9V/±56mA		78/80
WRA1212SD/ST-1WR2	1W		±12V/±42mA		78/80
WRA1215SD/ST-1WR2	1W		±15V/±33mA		75/77
WRA2405SD/ST-1WR2	1W	18-36 (24VDC)	±5V/±100mA	1500VDC (DIP/SMD)	75/77
WRA2409SD/ST-1WR2	1W		±9V/±56mA		75/77
WRA2412SD/ST-1WR2	1W		±12V/±42mA		75/77
WRA2415SD/ST-1WR2	1W		±15V/±33mA		75/77

WRB_SD/T-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRB1203ST/SD-1WR2	1W	9-18 (12VDC)	3.3V/303mA	1500VDC (DIP/SMD)	73/75
WRB1205ST/SD-1WR2	1W		5V/200mA		75/77
WRB1212ST/SD-1WR2	1W		12V/83mA		77/79
WRB1215ST/SD-1WR2	1W		15V/67mA		78/80
WRB1224ST/SD-1WR2	1W		24V/42mA		74/76
WRB2403ST/SD-1WR2	1W	18-36 (24VDC)	3.3V/303mA	1500VDC (DIP/SMD)	73/75
WRB2405ST/SD-1WR2	1W		5V/200mA		75/77
WRB2412ST/SD-1WR2	1W		12V/83mA		76/78
WRB2415ST/SD-1WR2	1W		15V/67mA		76/78
WRB2424ST/SD-1WR2	1W		24V/42mA		75/77

WRA_SD/T-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRA1205SD/ST-3WR2	3W	9-18 (12VDC)	±5V/±300mA	1500VDC (DIP/SMD)	76/78
WRA1209SD/ST-3WR2	3W		±9V/±167mA		76/78
WRA1212SD/ST-3WR2	3W		±12V/±125mA		77/79
WRA1215SD/ST-3WR2	3W		±15V/±100mA		77/79
WRA2405SD/ST-3WR2	3W	18-36 (24VDC)	±5V/±300mA	1500VDC (DIP/SMD)	76/78
WRA2409SD/ST-3WR2	3W		±9V/±167mA		78/80
WRA2412SD/ST-3WR2	3W		±12V/±125mA		80/82
WRA2415SD/ST-3WR2	3W		±15V/±100mA		79/81

WRB_SD/T-3WR2

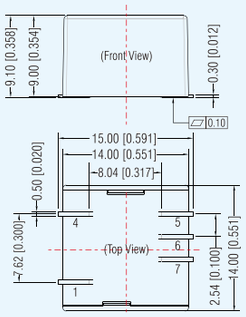
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRB1203ST/SD-3WR2	3W	9-18 (12VDC)	3.3V/758mA	1500VDC (DIP/SMD)	73/75
WRB1205ST/SD-3WR2	3W		5V/600mA		77/79
WRB1212ST/SD-3WR2	3W		12V/250mA		80/82
WRB1215ST/SD-3WR2	3W		15V/200mA		81/83
WRB1224ST/SD-3WR2	3W		24V/125mA		79/81
WRB2403ST/SD-3WR2	3W	18-36 (24VDC)	3.3V/758mA	1500VDC (DIP/SMD)	72/74
WRB2405ST/SD-3WR2	3W		5V/600mA		79/81
WRB2412ST/SD-3WR2	3W		12V/250mA		81/83
WRB2415ST/SD-3WR2	3W		15V/200mA		81/83
WRB2424ST/SD-3WR2	3W		24V/125mA		81/83

Package Dimension

1 WRA/B_ST-1W/3WR2 Series: LxWxH: 15.00 × 14.00 × 9.10 (mm)

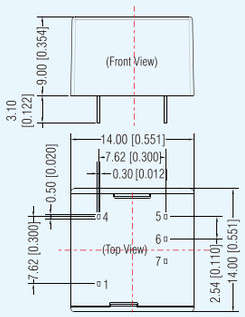


Pin-Out

Pin	WRA_ST-1W/3WR2	WRB_ST-1W/3WR2
1	GND	GND
4	Vin	Vin
5	+Vo	+Vo
6	0V	NC
7	-Vo	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 WRA/B_SD-1W/3WR2 Series: LxWxH: 14.00 × 14.00 × 9.00 (mm)



Pin-Out

Pin	WRA_SD-1W/3WR2	WRB_SD-1W/3WR2
1	GND	GND
4	Vin	Vin
5	+Vo	+Vo
6	0V	NC
7	-Vo	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Wide Input Voltage 3W Ultra-thin DIP/SMD Package, Isolated & Regulated Output Series

Features:

- Suitable for communication, instrumentation, industrial electronics applications
- Wide input voltage range
- Efficiency up to 82%
- No-load power consumption as low as 0.1W
- Isolation voltage 500VAC/1500VDC
- Operating temperature: -40℃ to +85℃
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- DIP/SMD packages optional
- 6.19mm ultra-thin package
- EN62368 approved

U/VRB-J(M)D/T-3W

CE RoHS

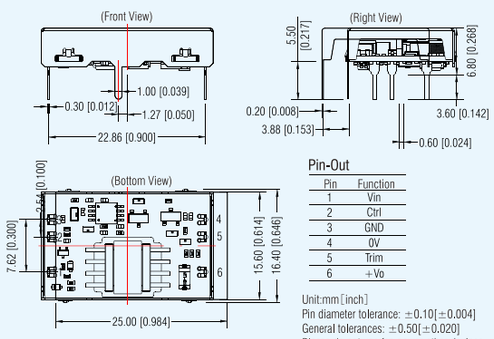
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB0505J(M)T/D-3W	3W	4.5-9 (5VDC)	5V/600mA	1500	70/72
VRB0512J(M)T/D-3W	3W		12V/250mA		74/76
VRB0515J(M)T/D-3W	3W		15V/200mA		75/77
VRB0524J(M)T/D-3W	3W		24V/125mA		74/76

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403J(M)T/D-3W	3W	9-36 (24VDC)	3.3V/600mA	1500	70/72
URB2405J(M)T/D-3W	3W		5V/600mA		75/77
URB2412J(M)T/D-3W	3W		12V/250mA		79/81
URB2415J(M)T/D-3W	3W		15V/200mA		80/82
URB2424J(M)T/D-3W	3W		24V/125mA		79/81

Package Dimension

1 U/VRB-JMD-3W(DIP package with shell)
Series: LxWxH: 25.00 x 16.40 x 6.80(mm)

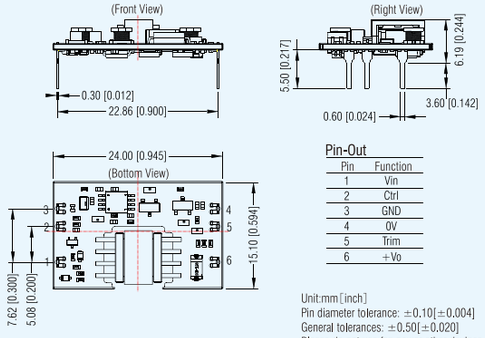


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

U/VRB-JD-3W(DIP package with shell)
Series: LxWxH: 24.00 x 15.10 x 6.19(mm)

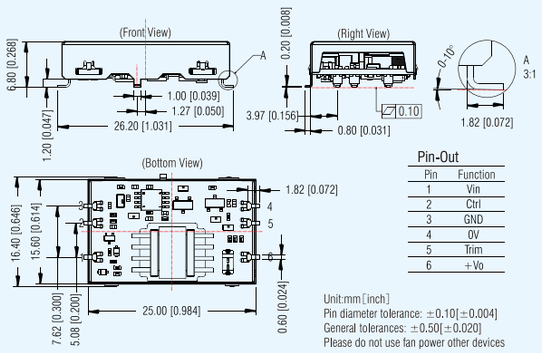


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

2 U/VRB-JMT-3W(DIP package with shell)
Series: LxWxH: 26.20 x 16.40 x 6.80(mm)

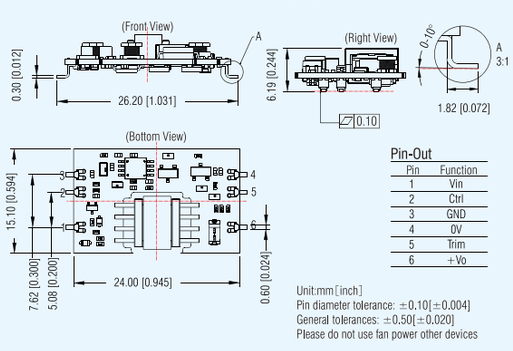


Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

U/VRB-JT-3W(DIP package with shell)
Series: LxWxH: 26.20 x 15.10 x 6.19(mm)



Pin-Out

Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

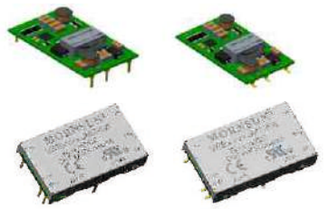
Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Wide Input Voltage 6W Ultra-thin DIP/SMD Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Efficiency up to 86%
- No-load power consumption as low as 0.12W
- Isolation voltage 500VAC/1500VDC
- Operating temperature: -40℃ to +85℃
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- DIP/SMD packages optional



VRB_J(M)D/T-6W

RoHS CB Report

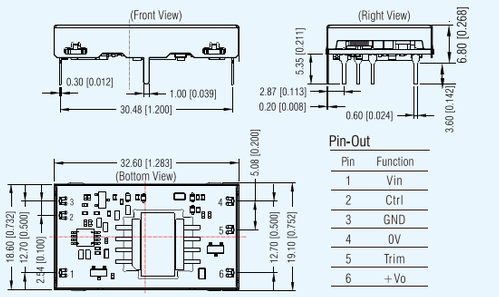
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1205J(M)D/T-6W	6W	9-18 (12VDC)	5V/1200mA	1500	79/81
VRB1212J(M)D/T-6W	6W		12V/500mA		83/85
VRB1215J(M)D/T-6W	6W		15V/400mA		84/86

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB2403J(M)D/T-6W	6W	18-36 (24VDC)	3.3V/1500mA	1500	77/79
VRB2405J(M)D/T-6W	6W		5V/1200mA		81/83
VRB2412J(M)D/T-6W	6W		12V/500mA		83/85
VRB2415J(M)D/T-6W	6W		15V/400mA		84/86

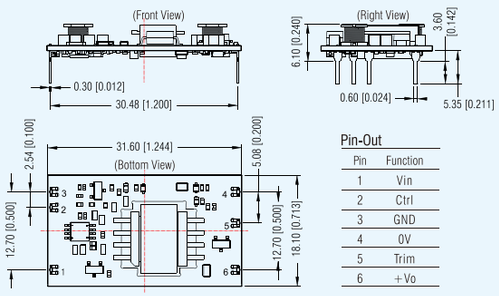
Package Dimension

1 VRB_JMD-6W(DIP package with shell)
Series: LxWxH: 32.60 x 19.10 x 6.80(mm)



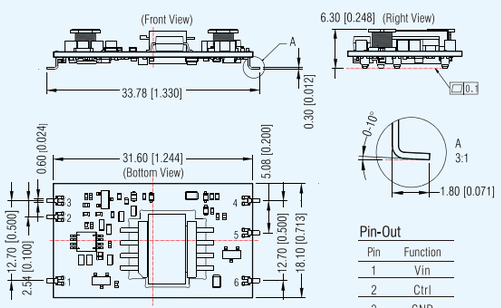
Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

VRB_JD-6W(DIP package with shell)
Series: LxWxH: 31.60 x 18.10 x 6.10(mm)



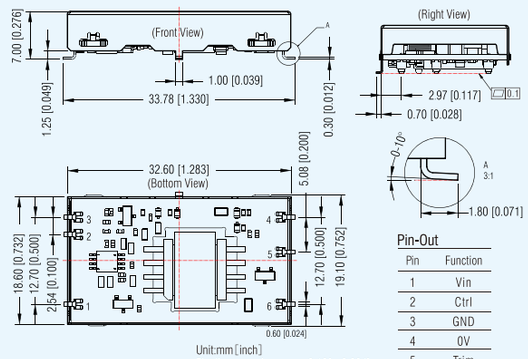
Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

2 VRB_JT-6W(DIP package with shell)
Series: LxWxH: 33.78 x 18.10 x 6.30(mm)



Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

VRB_JMT-6W(DIP package with shell)
Series: LxWxH: 33.78 x 19.10 x 7.00(mm)



Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

Wide Input Voltage 10W Ultra-thin DIP/SMD Package, Isolated & Regulated Output Series

Features:

- Efficiency up to 88%
- No-load power consumption as low as 0.096W
- Isolation voltage 500VAC/1500VDC
- Operating temperature: -40℃ to +85℃
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- DIP/SMD packages optional

URB_J(M)D/T-10W

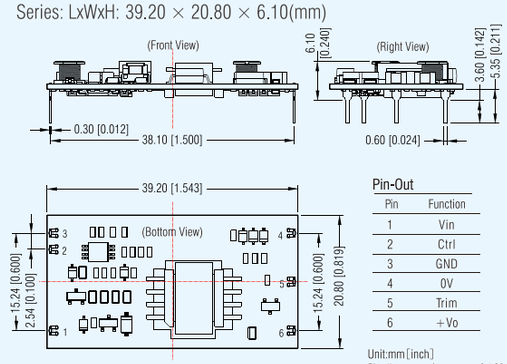
RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2405J(M)D/T-10W	10W	9-36 (24VDC)	5V/2000mA	1500	82/84
URB2412J(M)D/T-10W	10W		12V/833mA		85/87
URB2415J(M)D/T-10W	10W		15V/667mA		86/88

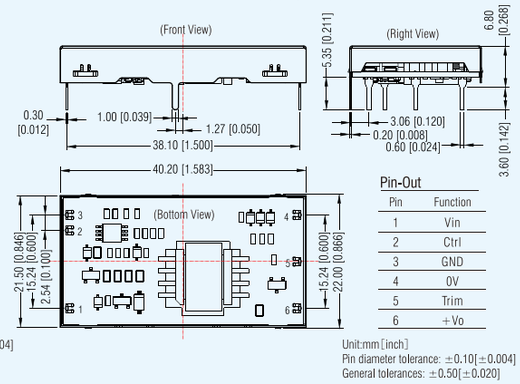
Package Dimension

1 URB_JD-10W(DIP package with shell)
Series: LxWxH: 39.20 × 20.80 × 6.10(mm)



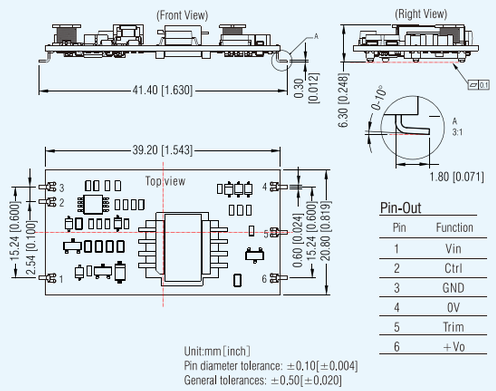
Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

URB_JMD-10W(DIP package with shell)
Series: LxWxH: 40.20 × 22.00 × 6.80(mm)



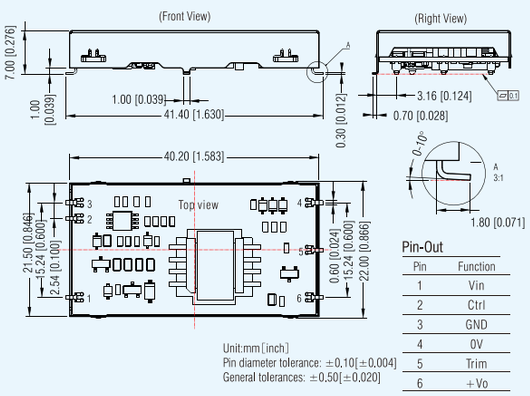
Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

2 URB_JT-10W(DIP package with shell)
Series: LxWxH: 41.40 × 20.80 × 6.30(mm)



Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

URB_JMT-10W(DIP package with shell)
Series: LxWxH: 41.40 × 22.00 × 7.00(mm)



Pin	Function
1	Vin
2	Ctrl
3	GND
4	0V
5	Trim
6	+Vo

Wide Input Voltage 15W Ultra-thin DIP/SMD Package, Isolated & Regulated Output Series

Features:

- Wide 4:1 input voltage range
- Efficiency up to 89%
- Isolation voltage 1500VDC
- Operating temperature: -40℃ to +85℃
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- DIP/SMD packages optional
- EN62368 approved, meet IEC/UL62368 standards

URB_J(M)D/T-15W

CE RoHS

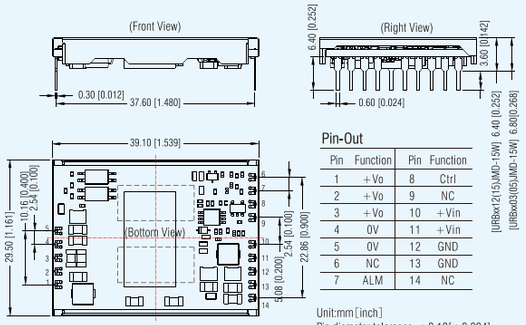
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403J(M)D/T-15W	15W	9-36 (24VDC)	3.3V/4500mA	1500	86/88
URB2405J(M)D/T-15W	15W		5V/3000mA		86/88
URB2412J(M)D/T-15W	15W		12V/1250mA		87/89
URB2415J(M)D/T-15W	15W		15V/1000mA		87/89

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB4803J(M)D/T-15W	15W	18-75 (48VDC)	3.3V/4500mA	1500	86/88
URB4805J(M)D/T-15W	15W		5V/3000mA		86/88
URB4812J(M)D/T-15W	15W		12V/1250mA		87/89
URB4815J(M)D/T-15W	15W		15V/1000mA		87/89

Package Dimension

1 URB_JMD-15W(DIP package with shell)
Series: LxWxH: 9.10 x 29.50 x 6.80(mm)

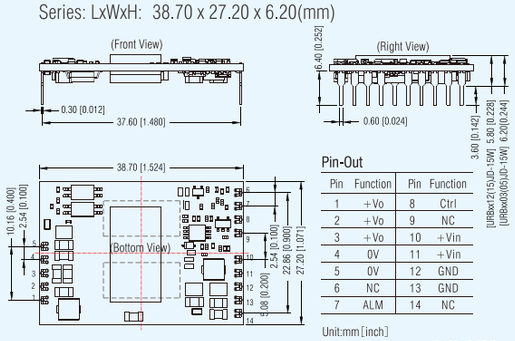


Pin-Out

Pin	Function	Pin	Function
1	+Vo	8	Ctrl
2	+Vo	9	NC
3	+Vo	10	+Vin
4	0V	11	+Vin
5	0V	12	GND
6	NC	13	GND
7	ALM	14	NC

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

URB_JD-15W(DIP package with shell)
Series: LxWxH: 38.70 x 27.20 x 6.20(mm)

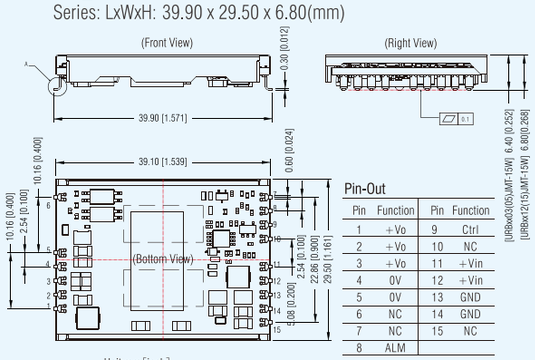


Pin-Out

Pin	Function	Pin	Function
1	+Vo	8	Ctrl
2	+Vo	9	NC
3	+Vo	10	+Vin
4	0V	11	+Vin
5	0V	12	GND
6	NC	13	GND
7	ALM	14	NC

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

2 URB_JMT-15W(DIP package with shell)
Series: LxWxH: 39.90 x 29.50 x 6.80(mm)

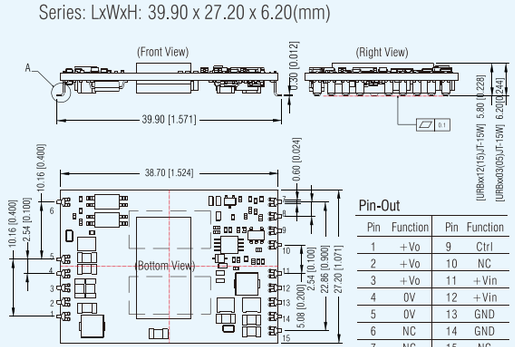


Pin-Out

Pin	Function	Pin	Function
1	+Vo	9	Ctrl
2	+Vo	10	NC
3	+Vo	11	+Vin
4	0V	12	+Vin
5	0V	13	GND
6	NC	14	GND
7	NC	15	NC
8	ALM		

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

URB_JT-15W(DIP package with shell)
Series: LxWxH: 39.90 x 27.20 x 6.20(mm)



Pin-Out

Pin	Function	Pin	Function
1	+Vo	9	Ctrl
2	+Vo	10	NC
3	+Vo	11	+Vin
4	0V	12	+Vin
5	0V	13	GND
6	NC	14	GND
7	NC	15	NC
8	ALM		

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

Wide Input Voltage 3W Ultra-thin SMD Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature: -40℃ to +85℃
- High efficiency up to 84%
- No-load power consumption as low as 0.1W
- Input under-voltage protection, output short-circuit protection, over-current protection
- International standard pin-out
- IEC/UL/EN60950 approved

URB_MT-3WR3

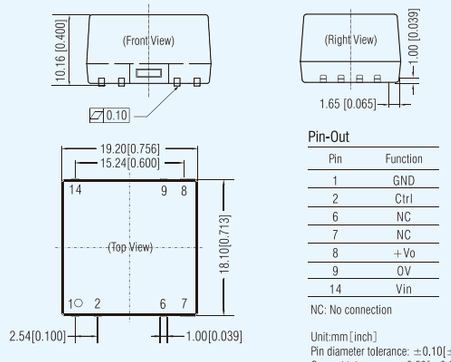
CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403MT-3WR3	3W	9-36 (24VDC)	3.3V/728mA	1500	73/75
URB2405MT-3WR3	3W		5V/600mA		78/80
URB2409MT-3WR3	3W		9V/333mA		78/80
URB2412MT-3WR3	3W		12V/250mA		80/82
URB2415MT-3WR3	3W		15V/200mA		81/83
URB2424MT-3WR3	3W		24V/125mA		80/82
URB4803MT-3WR3	3W	18-75 (48VDC)	3.3V/728mA	1500	73/75
URB4805MT-3WR3	3W		5V/600mA		77/79
URB4812MT-3WR3	3W		12V/250mA		80/82
URB4815MT-3WR3	3W		15V/200mA		82/84
URB4824MT-3WR3	3W		24V/125mA		80/82

Package Dimension

1 URB_MT-3WR3 Series : LxWxH: 19.20 × 18.10 × 10.16(mm)



Pin-Out

Pin	Function
1	GND
2	Ctrl
6	NC
7	NC
8	+Vo
9	OV
14	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Wide Input Voltage 1-3W SIP Package, Isolated & Regulated Output Series

Features:

- Suitable for communication, instrumentation, industrial electronics applications
- Operating temperature: -40℃ to +85℃
- Continuous output short-circuit protection (self-recovery)
- Remote ON/OFF
- Low ripple & noise
- EN62368 approved

WRA_S-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRA0505S-1WR2	1W	4.5-9 (5VDC)	±5V/±100mA	1500	71/73
WRA0512S-1WR2	1W		±12V/±42mA		74/76
WRA0515S-1WR2	1W		±15V/±33mA		73/75
WRA1205S-1WR2	1W	9-18 (12VDC)	±5V/±100mA	1500	76/78
WRA1212S-1WR2	1W		±12V/±42mA		79/81
WRA1215S-1WR2	1W		±15V/±33mA		76/78
WRA2405S-1WR2	1W	18-36 (24VDC)	±5V/±100mA	1500	77/79
WRA2409S-1WR2	1W		±9V/±56mA		77/79
WRA2412S-1WR2	1W		±12V/±42mA		77/79
WRA2415S-1WR2	1W		±15V/±33mA		77/79
WRA4805S-1WR2	1W	36-75 (48VDC)	±5V/±100mA	1500	74/76
WRA4812S-1WR2	1W		±12V/±42mA		76/78
WRA4815S-1WR2	1W		±15V/±33mA		78/80

WRB_S-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRB0503S-1WR2	1W	4.5-9 (5VDC)	3.3V/303mA	1500	69/71
WRB0505S-1WR2	1W		5V/200mA		70/72
WRB0512S-1WR2	1W		12V/83mA		74/76
WRB0515S-1WR2	1W		15V/67mA		73/75
WRB0524S-1WR2	1W		24V/42mA		71/73
WRB1203S-1WR2	1W	9-18 (12VDC)	3.3V/303mA	1500	73/75
WRB1205S-1WR2	1W		5V/200mA		75/77
WRB1209S-1WR2	1W		9V/111mA		77/79
WRB1212S-1WR2	1W		12V/83mA		77/79
WRB1215S-1WR2	1W		15V/67mA		78/80
WRB1224S-1WR2	1W		24V/42mA		74/76
WRB2403S-1WR2	1W	18-36 (24VDC)	3.3V/303mA	1500	73/75
WRB2405S-1WR2	1W		5V/200mA		75/77
WRB2412S-1WR2	1W		12V/83mA		76/78
WRB2415S-1WR2	1W		15V/67mA		76/78
WRB2424S-1WR2	1W		24V/42mA		75/77
WRB4803S-1WR2	1W	36-75 (48VDC)	3.3V/303mA	1500	73/75

WRE_S-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRE0505S-1WR2	1W	4.5-9 (5VDC)	±5V/±100mA	3000	71/73
WRE0512S-1WR2	1W		±12V/±42mA		74/76
WRE0515S-1WR2	1W		±15V/±33mA		73/75
WRE1205S-1WR2	1W	9-18 (12VDC)	±5V/±100mA	3000	76/78
WRE1212S-1WR2	1W		±12V/±42mA		79/81
WRE1215S-1WR2	1W		±15V/±33mA		76/78
WRE2405S-1WR2	1W	18-36 (24VDC)	±5V/±100mA	3000	77/79
WRE2412S-1WR2	1W		±12V/±42mA		77/79
WRE2415S-1WR2	1W		±15V/±33mA		77/79
WRE4805S-1WR2	1W	36-75 (48VDC)	±5V/±100mA	3000	74/76
WRE4812S-1WR2	1W		±12V/±42mA		76/78
WRE4815S-1WR2	1W		±15V/±33mA		78/80

WRF_S-1WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRF0503S-1WR2	1W	4.5-9 (5VDC)	3.3V/303mA	3000	69/71
WRF0505S-1WR2	1W		5V/200mA		70/72
WRF0512S-1WR2	1W		12V/83mA		74/76
WRF0515S-1WR2	1W		15V/67mA		73/75
WRF1203S-1WR2	1W	9-18 (12VDC)	3.3V/303mA	3000	73/75
WRF1205S-1WR2	1W		5V/200mA		75/77
WRF1209S-1WR2	1W		9V/111mA		77/79
WRF1212S-1WR2	1W		12V/83mA		77/79
WRF1215S-1WR2	1W		15V/67mA		78/80
WRF2403S-1WR2	1W	18-36 (24VDC)	3.3V/303mA	3000	73/75
WRF2405S-1WR2	1W		5V/200mA		75/77
WRF2412S-1WR2	1W		12V/83mA		76/78
WRF2415S-1WR2	1W		15V/67mA		76/78
WRF2424S-1WR2	1W		24V/42mA		75/77
WRF4803S-1WR2	1W	36-75 (48VDC)	3.3V/303mA	3000	73/75
WRF4805S-1WR2	1W		5V/200mA		74/76
WRF4812S-1WR2	1W		12V/83mA		78/80
WRF4815S-1WR2	1W		15V/67mA		77/79

URD_S-3WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VDC)	Eff(%) (typ)
URD480505S-3WR3	3W	18-75 (48VDC)	5/5(VDC)	300/300(mA)	3000	76/78
URD480512S-3WR3	3W		5/12(VDC)	300/125(mA)		76/78
URD480524S-3WR3	3W		5/24(VDC)	300/63(mA)		76/78

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

WRA_S-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRA0505S-3WR2	3W	4.5-9 (5VDC)	±5V/±250mA	1500	72/74
WRA0512S-3WR2	3W		±12V/±104mA		75/77
WRA0515S-3WR2	3W		±15V/±83mA		75/77
WRA0524S-3WR2	3W		±24V/±52mA		74/76
WRA1205S-3WR2	3W	9-18 (12VDC)	±5V/±300mA	1500	76/78
WRA1209S-3WR2	3W		±9V/±167mA		76/78
WRA1212S-3WR2	3W		±12V/±125mA		77/79
WRA1215S-3WR2	3W		±15V/±100mA		78/80
WRA2405S-3WR2	3W	18-36 (24VDC)	±5V/±300mA	1500	77/79
WRA2409S-3WR2	3W		±9V/±167mA		79/81
WRA2412S-3WR2	3W		±12V/±125mA		81/83
WRA2415S-3WR2	3W		±15V/±100mA		81/83

WRB_S-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRB0503S-3WR2	3W	4.5-9 (5VDC)	3.3V/758mA	1500	66/68
WRB0505S-3WR2	3W		5V/500mA		71/73
WRB0509S-3WR2	3W		9V/278mA		72/74
WRB0512S-3WR2	3W		12V/208mA		75/77
WRB0515S-3WR2	3W		15V/167mA		72/74
WRB0524S-3WR2	3W		24V/104mA		74/76
WRB1203S-3WR2	3W	9-18 (12VDC)	3.3V/758mA	1500	73/75
WRB1205S-3WR2	3W		5V/600mA		74/76
WRB1206S-3WR2	3W		6V/500mA		77/79
WRB1209S-3WR2	3W		9V/333mA		77/79
WRB1212S-3WR2	3W		12V/250mA		80/82
WRB1215S-3WR2	3W		15V/200mA		81/83
WRB1224S-3WR2	3W		24V/125mA		79/81
WRB2403S-3WR2	3W	18-36 (24VDC)	3.3V/758mA	1500	72/74
WRB2405S-3WR2	3W		5V/600mA		79/81
WRB2409S-3WR2	3W		9V/333mA		81/83
WRB2412S-3WR2	3W		12V/250mA		81/83
WRB2415S-3WR2	3W		15V/200mA		81/83
WRB2424S-3WR2	3W		24V/125mA		81/83

WRE_S-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRE0505S-3WR2	3W	4.5-9 (5VDC)	±5V/±250mA	3000	72/74
WRE0512S-3WR2	3W		±12V/±104mA		75/77
WRE0515S-3WR2	3W		±15V/±83mA		75/77
WRE1205S-3WR2	3W	9-18 (12VDC)	±5V/±300mA	3000	76/78
WRE1212S-3WR2	3W		±12V/±125mA		77/79
WRE1215S-3WR2	3W		±15V/±100mA		78/80
WRE2405S-3WR2	3W	18-36 (24VDC)	±5V/±300mA	3000	77/79
WRE2409S-3WR2	3W		±9V/±167mA		79/81
WRE2412S-3WR2	3W		±12V/±125mA		81/83
WRE2415S-3WR2	3W		±15V/±100mA		81/83
WRE4805S-3WR2	3W	36-75 (48VDC)	±5V/±300mA	3000	77/79
WRE4812S-3WR2	3W		±12V/±125mA		80/82
WRE4815S-3WR2	3W		±15V/±100mA		80/82

WRF_S-3WR2

CE RoHS

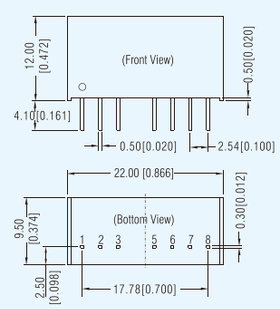
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRF0505S-3WR2	3W	4.5-9 (5VDC)	5V/500mA	3000	71/73
WRF0509S-3WR2	3W		9V/278mA		72/74
WRF0512S-3WR2	3W		12V/208mA		75/77
WRF0515S-3WR2	3W		15V/167mA		72/74
WRF1203S-3WR2	3W	9-18 (12VDC)	3.3V/758mA	3000	73/75
WRF1205S-3WR2	3W		5V/600mA		74/76
WRF1209S-3WR2	3W		9V/333mA		77/79
WRF1212S-3WR2	3W		12V/250mA		80/82
WRF1215S-3WR2	3W		15V/200mA		81/83
WRF1224S-3WR2	3W		24V/125mA		79/81
WRF2403S-3WR2	3W	18-36 (24VDC)	3.3V/758mA	3000	72/74
WRF2405S-3WR2	3W		5V/600mA		79/81
WRF2409S-3WR2	3W		9V/333mA		81/83
WRF2412S-3WR2	3W		12V/250mA		81/83
WRF2415S-3WR2	3W		15V/200mA		81/83
WRF2424S-3WR2	3W		24V/125mA		81/83

Package Dimension

① WRA/B/E/F_S-1WR2,WRA/B/E/F_S-3WR2

Series: LxWxH: 22.00 × 9.50 × 12.00(mm)



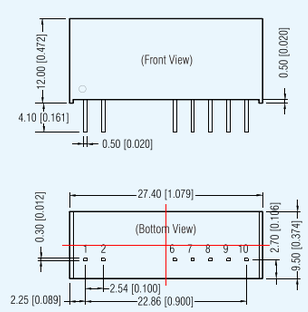
Pin-Out

Pin	Single	Dual
1	GND	GND
2	Vin	Vin
3	Ctrl	Ctrl
5	NC	NC
6	+Vo	+Vo
7	0V	0V
8	CS	-Vo

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

② URD_S-3WR3 Series: LxWxH: 27.40 × 9.50 × 12.00(mm)



Pin-Out

Pin	Function
1	GND
2	Vin
6	+Vo
7	OV1
8	CS
9	Ov2
10	+Vo2

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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Wide Input Voltage 6-10W SIP Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature: -40℃ to +85℃/-40℃ to +105℃
- No-load power consumption as low as 0.11W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- Meet CISPR22/EN55022 CLASS A
- International standard pin-out
- High power density
- EN62368 approved

URA_S-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405S-6WR3	6W	9-36 (24VDC)	±5V/±600mA	1500	78/80
URA2409S-6WR3	6W		±9V/±333mA		81/83
URA2412S-6WR3	6W		±12V/±250mA		81/83
URA2415S-6WR3	6W		±15V/±200mA		81/83
URA2424S-6WR3	6W		±24V/±125mA		80/82

URB_S-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403S-6WR3	6W	9-36 (24VDC)	3.3V/1350mA	1600	76/78
URB2405S-6WR3	6W		5V/1200mA		80/82
URB2409S-6WR3	6W		9V/667mA		82/84
URB2412S-6WR3	6W		12V/500mA		84/86
URB2415S-6WR3	6W		15V/400mA		85/87
URB2424S-6WR3	6W		24V/250mA		83/85

URB_S-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403S-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	1500	83/85
URB2405S-10WR3	10W		5V/2000mA		86/88
URB2409S-10WR3	10W		9V/1111mA		86/88
URB2412S-10WR3	10W		12V/833mA		86/88
URB2415S-10WR3	10W		15V/667mA		86/88
URB2424S-10WR3	10W		24V/417mA		86/88

VRB_S-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1203S-6WR3	6W	9-18 (12VDC)	3.3V/1350mA	1600	74/76
VRB1205S-6WR3	6W		5V/±1200mA		78/80
VRB1209S-6WR3	6W		9V/±667mA		80/82
VRB1212S-6WR3	6W		12V/±500mA		82/84
VRB1215S-6WR3	6W		15V/±400mA		82/84
VRB1224S-6WR3	6W		24V/±250mA		82/84
VRB2403S-6WR3	6W	18-36 (24VDC)	3.3V/1350mA	1600	76/78
VRB2405S-6WR3	6W		5V/±1200mA		80/82
VRB2409S-6WR3	6W		9V/±667mA		82/84
VRB2412S-6WR3	6W		12V/±500mA		84/86
VRB2415S-6WR3	6W		15V/±400mA		85/87
VRB2424S-6WR3	6W		24V/±250mA		83/85

VRB_S-10WR3

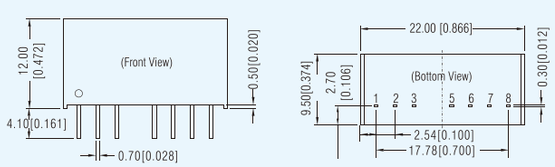
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1203S-10WR3	10W	9-18 (12VDC)	3.3V/2400mA	1500	81/83
VRB1205S-10WR3	10W		5V/2000mA		84/86
VRB1209S-10WR3	10W		9V/1111mA		84/86
VRB1212S-10WR3	10W		12V/833mA		84/86
VRB1215S-10WR3	10W		15V/667mA		84/86
VRB1224S-10WR3	10W		24V/417mA		84/86
VRB2403S-10WR3	10W	18-36 (24VDC)	3.3V/2400mA	1500	83/85
VRB2405S-10WR3	10W		5V/2000mA		86/88
VRB2409S-10WR3	10W		9V/1111mA		86/88
VRB2412S-10WR3	10W		12V/833mA		86/88
VRB2415S-10WR3	10W		15V/667mA		86/88
VRB2424S-10WR3	10W		24V/417mA		86/88

Package Dimension

1 URA/B_S-6WR3, URB_S-10WR3, VRB_S-6WR3, VRB_S-10WR3 Series: LxWxH: 22.00 × 9.50 × 12.00(mm)



Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Pin-Out

Pin	URA/VRASeries	URB/VRBSeries
1	GND	GND
2	Vin	Vin
3	Ctrl	Ctrl
5	NC	NC
6	+Vo	+Vo
7	0V	0V
8	-Vo	NC

NC: No connection

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Wide Input Voltage 3W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for communication, instrumentation, industrial electronics applications
- Operating temperature: -40℃ to +85℃
- Continuous output short-circuit protection (self-recovery)
- Low ripple & noise
- EN60950 approved

PWB_ZP-3WR2

CE RoHS

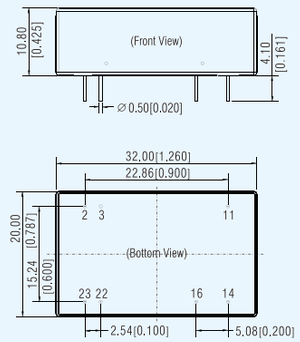
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
PWB2403ZP-3WR2	3W	9-36 (24VDC)	3.3V/909mA	1500	73/75
PWB2405ZP-3WR2	3W		5V/600mA		78/80
PWB2409ZP-3WR2	3W		9V/333mA		78/80
PWB2412ZP-3WR2	3W		12V/250mA		79/81
PWB2415ZP-3WR2	3W		15V/200mA		80/82
PWB2424ZP-3WR2	3W		24V/125mA		80/82
PWB4803ZP-3WR2	3W	18-75 (48VDC)	3.3V/909mA	1500	74/76
PWB4805ZP-3WR2	3W		5V/600mA		77/79
PWB4809ZP-3WR2	3W		9V/333mA		79/81
PWB4812ZP-3WR2	3W		12V/250mA		80/82
PWB4815ZP-3WR2	3W		15V/200mA		81/83
PWB4824ZP-3WR2	3W		24V/125mA		79/81

Note:
1. Series with suffix "ZP" are standard DIP24 packaged with aluminum alloy casing. And for detailed dimension please refer to the illustration.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

Package Dimension

1 PWB_ZP-3WR2 Series: LxWxH: 32.00 × 20.00 × 10.80(mm)



Pin-Out

Pin	Function
2,3	GND
11	NC
14	+Vo
16	0V
22,23	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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Wide Input Voltage 3-10W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature: -40℃ to +85℃
- No-load power consumption as low as 0.11W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- Meet CISPR22/EN55022 CLASS A
- International standard pin-out
- IEC/UL/EN62368 approved

WRA_ZP-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRA0505ZP-3WR2	3W	4.5-9 (5VDC)	±5V/±300mA	1500	74/76
WRA0509ZP-3WR2	3W		±9V/±166mA		74/76
WRA0512ZP-3WR2	3W		±12V/±125mA		76/78
WRA0515ZP-3WR2	3W		±15V/±100mA		76/78
WRA1205ZP-3WR2	3W	9-18 (12VDC)	±5V/±300mA	1500	79/81
WRA1209ZP-3WR2	3W		±9V/±166mA		82/84
WRA1212ZP-3WR2	3W		±12V/±125mA		82/84
WRA1215ZP-3WR2	3W		±15V/±100mA		83/85
WRA2405ZP-3WR2	3W	18-36 (24VDC)	±5V/±300mA	1500	80/82
WRA2412ZP-3WR2	3W		±12V/±125mA		82/84
WRA2415ZP-3WR2	3W		±15V/±100mA		82/84
WRA4805ZP-3WR2	3W	36-75 (48VDC)	±5V/±300mA	1500	80/82
WRA4812ZP-3WR2	3W		±12V/±125mA		82/84
WRA4815ZP-3WR2	3W		±15V/±100mA		83/85
WRA4824ZP-3WR2	3W		±24V/±63mA		82/84

WRB_ZP-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRB0505ZP-3WR2	3W	4.5-9 (5VDC)	5V/600mA	1500	72/74
WRB0512ZP-3WR2	3W		12V/250mA		75/77
WRB0515ZP-3WR2	3W		15V/200mA		75/77
WRB1203ZP-3WR2	3W	9-18 (12VDC)	3.3V/909mA	1500	72/74
WRB1205ZP-3WR2	3W		5V/600mA		79/81
WRB1212ZP-3WR2	3W		12V/250mA		81/83
WRB1215ZP-3WR2	3W		15V/200mA		80/82
WRB1224ZP-3WR2	3W		24V/125mA		81/83
WRB2403ZP-3WR2	3W	18-36 (24VDC)	3.3V/909mA	1500	76/78
WRB2405ZP-3WR2	3W		5V/600mA		79/81
WRB2409ZP-3WR2	3W		9V/333mA		79/81
WRB2412ZP-3WR2	3W		12V/250mA		84/86
WRB2415ZP-3WR2	3W		15V/200mA		84/86
WRB2424ZP-3WR2	3W		24V/125mA		83/85
WRB4803ZP-3WR2	3W	36-75 (48VDC)	3.3V/909mA	1500	74/76
WRB4805ZP-3WR2	3W		5V/600mA		80/82
WRB4812ZP-3WR2	3W		12V/250mA		84/86
WRB4815ZP-3WR2	3W		15V/200mA		84/86
WRB4824ZP-3WR2	3W		24V/125mA		82/84

Note:
1. Series with suffix "ZP" are standard DIP24 packaged with aluminum alloy casing.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

VRA_ZP-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRA0505ZP-6WR3	6W	4.5-9 (5VDC)	±5V/±600mA	1500	76/78
VRA0512ZP-6WR3	6W		±12V/±250mA		82/84
VRA0515ZP-6WR3	6W		±15V/±200mA		82/84
VRA0524ZP-6WR3	6W		±24V/±125mA		82/84
VRA1205ZP-6WR3	6W	9-18 (12VDC)	±5V/±600mA	1500	78/80
VRA1212ZP-6WR3	6W		±12V/±250mA		82/84
VRA1215ZP-6WR3	6W		±15V/±200mA		83/85
VRA1224ZP-6WR3	6W		±24V/±125mA		82/84
VRA2405ZP-6WR3	6W	18-36 (24VDC)	±5V/±600mA	1500	81/83
VRA2412ZP-6WR3	6W		±12V/±250mA		84/86
VRA2415ZP-6WR3	6W		±15V/±200mA		85/87
VRA2424ZP-6WR3	6W		±24V/±125mA		83/85
VRA4805ZP-6WR3	6W	36-75 (48VDC)	±5V/±600mA	1500	81/83
VRA4812ZP-6WR3	6W		±12V/±250mA		85/87
VRA4815ZP-6WR3	6W		±15V/±200mA		83/85
VRA4824ZP-6WR3	6W		±24V/±125mA		83/85

VRB_ZP-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB0505ZP-6WR3	6W	4.5-9 (5VDC)	5V/1200mA	1500	76/78
VRB0512ZP-6WR3	6W		12V/500mA		82/84
VRB0515ZP-6WR3	6W		15V/400mA		82/84
VRB0524ZP-6WR3	6W		24V/250mA		82/84
VRB1203ZP-6WR3	6W	9-18 (12VDC)	3.3V/1500mA	1500	73/75
VRB1205ZP-6WR3	6W		5V/1200mA		78/80
VRB1212ZP-6WR3	6W		12V/500mA		82/84
VRB1215ZP-6WR3	6W		15V/400mA		83/85
VRB1224ZP-6WR3	6W		24V/250mA		83/85
VRB2403ZP-6WR3	6W	18-36 (24VDC)	3.3V/1500mA	1500	76/78
VRB2405ZP-6WR3	6W		5V/1200mA		80/82
VRB2412ZP-6WR3	6W		12V/500mA		83/85
VRB2415ZP-6WR3	6W		15V/400mA		84/86
VRB2424ZP-6WR3	6W		24V/250mA		84/86
VRB4803ZP-6WR3	6W	36-75 (48VDC)	3.3V/1500mA	1500	77/79
VRB4805ZP-6WR3	6W		5V/1200mA		81/83
VRB4812ZP-6WR3	6W		12V/500mA		85/87
VRB4815ZP-6WR3	6W		15V/400mA		86/88
VRB4824ZP-6WR3	6W		24V/250mA		85/87

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

URA_ZP-6WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405ZP-6WR3	6W	9-36 (24VDC)	±5V/±600mA	1500	81/83
URA2409ZP-6WR3	6W		±9V/±333mA		84/86
URA2412ZP-6WR3	6W		±12V/±250mA		85/87
URA2415ZP-6WR3	6W		±15V/±200mA		86/88
URA2424ZP-6WR3	6W		±24V/±125mA		85/87
URA4805ZP-6WR3	6W	18-75 (48VDC)	±5V/±600mA	1500	81/83
URA4812ZP-6WR3	6W		±12V/±250mA		85/87
URA4815ZP-6WR3	6W		±15V/±200mA		86/88

URB_ZP-6WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403ZP-6WR3	6W	9-36 (24VDC)	3.3V/1500mA	1500	77/79
URB2405ZP-6WR3	6W		5V/1200mA		81/83
URB2409ZP-6WR3	6W		9V/667mA		82/84
URB2412ZP-6WR3	6W		12V/500mA		85/87
URB2415ZP-6WR3	6W		15V/400mA		86/88
URB2424ZP-6WR3	6W		24V/250mA		85/87
URB4803ZP-6WR3	6W	18-75 (48VDC)	3.3V/1500mA	1500	78/80
URB4805ZP-6WR3	6W		5V/1200mA		82/84
URB4809ZP-6WR3	6W		9V/667mA		83/85
URB4812ZP-6WR3	6W		12V/500mA		85/87
URB4815ZP-6WR3	6W		15V/400mA		86/88
URB4824ZP-6WR3	6W		24V/250mA		85/87

URB_ZP-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403ZP-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	1500	85/87
URB2405ZP-10WR3	10W		5V/2000mA		86/88
URB2412ZP-10WR3	10W		12V/833mA		85/87
URB2415ZP-10WR3	10W		15V/667mA		85/87
URB2424ZP-10WR3	10W		24V/416mA		86/88
URB4803ZP-10WR3	10W	18-75 (48VDC)	3.3V/2400mA	1500	84/86
URB4805ZP-10WR3	10W		5V/2000mA		85/87
URB4812ZP-10WR3	10W		12V/833mA		85/87
URB4815ZP-10WR3	10W		15V/667mA		85/87
URB4824ZP-10WR3	10W		24V/416mA		86/88

VRA_ZP-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRA1205ZP-10WR3	10W	9-18 (12VDC)	±5V/±1000mA	1500	81/83
VRA1212ZP-10WR3	10W		±12V/±416mA		85/87
VRA1215ZP-10WR3	10W		±15V/±333mA		85/87
VRA2405ZP-10WR3	10W	18-36 (24VDC)	±5V/±1000mA	1500	81/83
VRA2412ZP-10WR3	10W		±12V/±416mA		85/87
VRA2415ZP-10WR3	10W		±15V/±333mA		85/87
VRA4805ZP-10WR3	10W	36-75 (48VDC)	±5V/±1000mA	1500	81/83
VRA4812ZP-10WR3	10W		±12V/±416mA		85/87
VRA4815ZP-10WR3	10W		±15V/±333mA		85/87

VRB_ZP-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1203ZP-10WR3	10W	9-18 (12VDC)	3.3V/2400mA	1500	85/87
VRB1205ZP-10WR3	10W		5V/2000mA		85/87
VRB1212ZP-10WR3	10W		12V/833mA		85/87
VRB1215ZP-10WR3	10W		15V/667mA		85/87
VRB1224ZP-10WR3	10W		24V/416mA		86/88
VRB2403ZP-10WR3	10W	18-36 (24VDC)	3.3V/2400mA	1500	85/87
VRB2405ZP-10WR3	10W		5V/2000mA		86/88
VRB2412ZP-10WR3	10W		12V/833mA		85/87
VRB2415ZP-10WR3	10W		15V/667mA		85/87
VRB2424ZP-10WR3	10W		24V/416mA		86/88
VRB4803ZP-10WR3	10W	36-75 (48VDC)	3.3V/2400mA	1500	85/87
VRB4805ZP-10WR3	10W		5V/2000mA		86/88
VRB4812ZP-10WR3	10W		12V/833mA		85/87
VRB4815ZP-10WR3	10W		15V/667mA		85/87
VRB4824ZP-10WR3	10W		24V/416mA		86/88

URA_ZP-10WR3

CE RoHS

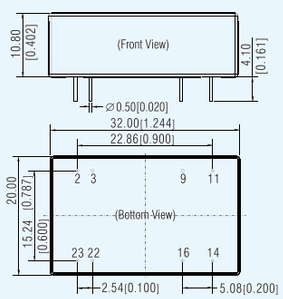
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405ZP-10WR3	10W	9-36 (24VDC)	±5V/±1000mA	1500	81/83
URA2412ZP-10WR3	10W		±12V/±416mA		85/87
URA2415ZP-10WR3	10W		±15V/±333mA		85/87
URA4805ZP-10WR3	10W	18-75 (48VDC)	±5V/±1000mA	1500	81/83
URA4812ZP-10WR3	10W		±12V/±416mA		85/87
URA4815ZP-10WR3	10W		±15V/±333mA		85/87

Package Dimension

1 WRA/B_ZP-3WR2, VRA/B_ZP-6WR3, URA/B_ZP-6WR3

Series: LxWxH: 32.00 × 20.00 × 10.80(mm)



Pin-Out

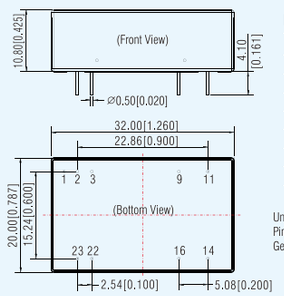
Pin	Single	Dual
2,3	GND	GND
9	No Pin	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 VRA/B_ZP-10WR3, URA/B_ZP-10WR3

Series: LxWxH: 32.00 × 20.00 × 10.80(mm)



Pin-Out

Pin	Single	Dual
1	Ctrl	Ctrl
2,3	GND	GND
9	No Pin	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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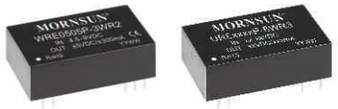
Wide Input Voltage 3-6W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for communication, instrumentation, industrial electronics applications
- Operating temperature: -40℃ to +85℃
- Continuous output short-circuit protection (self-recovery)
- Remote ON/OFF
- Low ripple & noise
- High power density
- EN62368 approved



WRE_P-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRE0505P-3WR2	3W	4.5-9 (5VDC)	±5V/±300mA	3000	74/76
WRE0512P-3WR2	3W		±12V/±125mA		76/78
WRE0515P-3WR2	3W		±15V/±100mA		76/78
WRE1205P-3WR2	3W	9-18 (12VDC)	±5V/±300mA	3000	79/81
WRE1209P-3WR2	3W		±9V/±166mA		82/84
WRE1212P-3WR2	3W		±12V/±125mA		82/84
WRE1215P-3WR2	3W		±15V/±100mA		83/85
WRE2405P-3WR2	3W	18-36 (24VDC)	±5V/±300mA	3000	80/82
WRE2412P-3WR2	3W		±12V/±125mA		82/84
WRE2415P-3WR2	3W		±15V/±100mA		82/84
WRE4803P-3WR2	3W	36-75 (48VDC)	±3.3V/±909mA	3000	74/76
WRE4805P-3WR2	3W		±5V/±300mA		80/82
WRE4812P-3WR2	3W		±12V/±125mA		82/84
WRE4815P-3WR2	3W		±15V/±100mA		83/85

WRF_P-3WR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
WRF0505P-3WR2	3W	4.5-9 (5VDC)	5V/600mA	3000	72/74
WRF0512P-3WR2	3W		12V/250mA		75/77
WRF0515P-3WR2	3W		15V/200mA		75/77
WRF1203P-3WR2	3W	9-18 (12VDC)	3.3V/909mA	3000	72/74
WRF1205P-3WR2	3W		5V/600mA		79/81
WRF1212P-3WR2	3W		12V/250mA		81/83
WRF1215P-3WR2	3W		15V/200mA		80/82
WRF1224P-3WR2	3W		24V/125mA		81/83
WRF2403P-3WR2	3W	18-36 (24VDC)	3.3V/909mA	3000	76/78
WRF2405P-3WR2	3W		5V/600mA		79/81
WRF2412P-3WR2	3W		12V/250mA		84/86
WRF2415P-3WR2	3W		15V/200mA		84/86
WRF2424P-3WR2	3W		24V/125mA		83/85
WRF4803P-3WR2	3W	36-75 (48VDC)	3.3V/909mA	3000	74/76
WRF4805P-3WR2	3W		5V/600mA		80/82
WRF4812P-3WR2	3W		12V/250mA		84/86
WRF4815P-3WR2	3W		15V/200mA		84/86

URF_P-6WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF2403P-6WR3	6W	9-36 (24VDC)	3.3V/1500mA	3000	77/79
URF2405P-6WR3	6W		5V/1200mA		80/82
URF2409P-6WR3	6W		9V/667mA		83/85
URF2412P-6WR3	6W		12V/500mA		84/86
URF2415P-6WR3	6W		15V/400mA		86/88
URF2424P-6WR3	6W		24V/250mA		85/87
URF2425P-6WR3	6W		25V/240mA		85/87
URF4803P-6WR3	6W	18-75 (48VDC)	3.3V/1500mA	3000	77/79
URF4805P-6WR3	6W		5V/1200mA		81/83
URF4812P-6WR3	6W		12V/500mA		85/87
URF4815P-6WR3	6W		15V/400mA		86/88
URF4824P-6WR3	6W		24V/250mA		85/87

URE_P-6WR3

cULus CE RoHS CB Report

Product Program

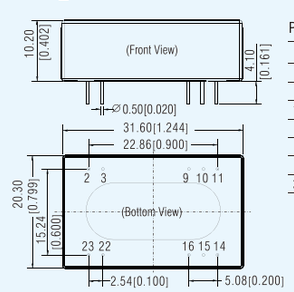
Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URE2405P-6WR3	6W	9-36 (24VDC)	±5V/±600mA	3000	78/80
URE2412P-6WR3	6W		±12V/±250mA		82/84
URE2415P-6WR3	6W		±15V/±200mA		83/85

Note:

1. Series with suffix "P" are standard DIP24 packaged with plastic casing.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

Package Dimension

① WRE/F_P-3WR2 Series: LxWxH: 31.60 × 20.30 × 10.20(mm)



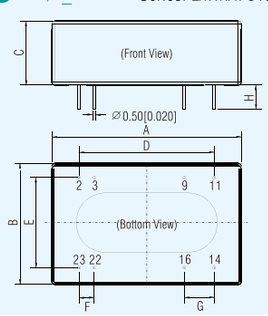
Pin-Out

Pin	Single	Dual
2,3	GND	GND
9	NC	0V
10,15	NC	NC
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

No:No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

② URE/F_P-6WR3 Series: LxWxH: 31.60 × 20.30 × 10.20(mm)



Pin-Out

	URA/B_ZP-6WR3	
Pin	Single	Dual
2,3	GND	GND
9	No Pin	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Wide Input Voltage 6-20W DIP Package, Isolated & Regulated Output Series (Medical)

Features:

- EN60601-1approved (3rd edition medical certified, 2xMOPP)
- Specialized for medical application, widely used in the energy storage system with low no-load power consumption
- Isolation voltage 6000VDC (reinforced insulation)
- Operating temperature: -40℃ to +85℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- International standard pin-out
- EN62368 approved

URH_P-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URH2405P-6WR3	6W	9-36 (24VDC)	5V/1200mA	6000	78/80
URH2406P-6WR3	6W		6V/1000mA		79/81
URH2409P-6WR3	6W		9V/667mA		81/83
URH2412P-6WR3	6W		12V/500mA		82/84
URH2415P-6WR3	6W		15V/400mA		83/85
URH2418P-6WR3	6W		18V/333mA		83/85
URH2424P-6WR3	6W		24V/250mA		82/84
URH4805P-6WR3	6W	18-75 (48VDC)	5V/1200mA	6000	79/81
URH4806P-6WR3	6W		6V/		
URH4809P-6WR3	6W		9V/667mA		81/83
URH4812P-6WR3	6W		12V/500mA		82/84
URH4815P-6WR3	6W		15V/400mA		83/85
URH4818P-6WR3	6W		18V/		
URH4824P-6WR3	6W		24V/250mA		82/84

URH_LP-20WR3

CE RoHS

Product Program

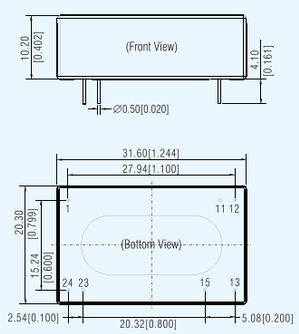
Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URH2403LP-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	5000	83/85
URH2405LP-20WR3	20W		5V/4000mA		84/86
URH2412LP-20WR3	20W		12V/1666mA		84/86
URH2415LP-20WR3	20W		15V/1333mA		85/87
URH2424LP-20WR3	20W		24V/833mA		87/89
URH4803LP-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	5000	84/86
URH4805LP-20WR3	20W		5V/4000mA		85/87
URH4812LP-20WR3	20W		12V/1666mA		85/87
URH4815LP-20WR3	20W		15V/1333mA		86/88
URH4824LP-20WR3	20W		24V/833mA		87/89

Note:

1. Series with suffix "P" are standard DIP24 packaged with plastic casing, with suffix "LP" are 2*1 packaged with plastic casing. And for detailed dimension please refer to the illustration.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

Package Dimension

① URH_P-6WR3 Series: LxWxH: 31.60 × 20.30 × 10.20(mm)

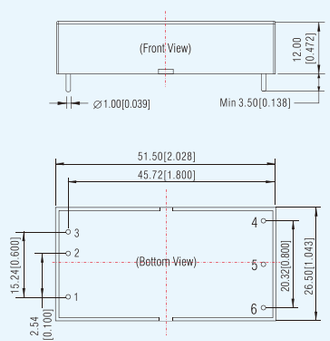


Pin-Out

Pin	Function
1	Vin
11	No pin
12	0V
13	+Vo
15	No pin
23	GND
24	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

② URH_LP-20WR3 Series: LxWxH: 51.50 x 26.50 x 12.00(mm)



Pin-Out

Pin	Function
1	Ctrl
2	GND
3	Vin
4	+Vo
5	0V
6	Trim

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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Wide Input Voltage 6~10W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature: -40℃ to +85℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- Meet CISPR22/EN55022 CLASS A
- International standard pin-out
- IEC/UL/EN60950, EN62368, EN50155 approved

A2S Chassis Mounting

A4S DIN-Rail Mounting

VRA_YMD-6WR3*

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRA1205YMD-6WR3	6W	9-18 (12VDC)	±5V/±600mA	1500	79/81
VRA1212YMD-6WR3	6W		±12V/±250mA		83/85
VRA1215YMD-6WR3	6W		±15V/±200mA		81/83
VRA2405YMD-6WR3	6W	18-36 (24VDC)	±5V/±600mA	1500	81/83
VRA2412YMD-6WR3	6W		±12V/±250mA		85/87
VRA2415YMD-6WR3	6W		±15V/±200mA		85/87

VRB_YMD-6WR3*

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1205YMD-6WR3	6W	9-18 (12VDC)	5V/1200mA	1500	79/81
VRB1212YMD-6WR3	6W		12V/500mA		83/85
VRB2403YMD-6WR3	6W	18-36 (24VDC)	3.3V/1500mA	1500	75/77
VRB2405YMD-6WR3	6W		5V/1200mA		80/82
VRB2409YMD-6WR3	6W		9V/667mA		83/85
VRB2412YMD-6WR3	6W		12V/500mA		83/85
VRB2415YMD-6WR3	6W		15V/400mA		84/86
VRB2424YMD-6WR3	6W		24V/250mA		83/85
VRB4803YMD-6WR3	6W	36-75 (48VDC)	3.3V/1500mA	1500	77/79
VRB4805YMD-6WR3	6W		5V/1200mA		81/83
VRB4812YMD-6WR3	6W		12V/500mA		85/87
VRB4815YMD-6WR3	6W		15V/400mA		86/88
VRB4824YMD-6WR3	6W		24V/250mA		86/88

VRB_YMD-10WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB0505YMD-10WR3	10W	4.5-9 (5VDC)	5V/2000mA	1500	83/85
VRB0512YMD-10WR3	10W		12V/834mA		81/83
VRB0515YMD-10WR3	10W		15V/667mA		82/84
VRB0524YMD-10WR3	10W		24V/417mA		81/83
VRB1205YMD-10WR3	10W	9-18 (12VDC)	5V/2000mA	1500	81/83
VRB2405YMD-10WR3	10W	9-18 (12VDC)	5V/2000mA	1500	81/83
VRB2412YMD-10WR3	10W		12V/833mA		85/87
VRB2415YMD-10WR3	10W		15V/667mA		86/88
VRB2424YMD-10WR3	10W		24V/416mA		86/88
VRB4803YMD-10WR3	10W	36-75 (48VDC)	3.3V/2400mA	1500	77/79
VRB4805YMD-10WR3	10W		5V/2000mA		81/83
VRB4812YMD-10WR3*	10W		12V/833mA		85/87
VRB4815YMD-10WR3*	10W		15V/667mA		85/87
VRB4824YMD-10WR3	10W		24V/416mA		86/88

URA_YMD-6WR3*

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405YMD-6WR3	6W	9-36 (24VDC)	±5V/±600mA	1500	81/83
URA2412YMD-6WR3	6W		±12V/±250mA		84/87
URA2415YMD-6WR3	6W		±15V/±200mA		85/87
URA2424YMD-6WR3	6W		±24V/±125mA		85/87
URA4805YMD-6WR3	6W	18-75 (48VDC)	±5V/±600mA	1500	81/83
URA4812YMD-6WR3	6W		±12V/±250mA		85/87
URA4815YMD-6WR3	6W		±15V/±200mA		86/88

URB_YMD-6WR3*

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403YMD-6WR3	6W	9-36 (24VDC)	3.3V/1500mA	1500	75/77
URB2405YMD-6WR3	6W		5V/1200mA		80/83
URB2409YMD-6WR3	6W		9V/667mA		83/85
URB2412YMD-6WR3	6W		12V/500mA		84/87
URB2415YMD-6WR3	6W		15V/400mA		85/87
URB2424YMD-6WR3	6W		24V/250mA		86/88
URB4803YMD-6WR3	3W	18-75 (48VDC)	3.3V/1500mA	1500	77/79
URB4805YMD-6WR3	3W		5V/1200mA		81/83
URB4812YMD-6WR3	3W		12V/500mA		85/87
URB4815YMD-6WR3	3W		15V/400mA		86/88
URB4824YMD-6WR3	3W		24V/250mA		86/88

VRA_YMD-10WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRA0505YMD-10WR3	10W	4.5-9 (5VDC)	±5V/±1000mA	1500	76/78
VRA0512YMD-10WR3	10W		±12V/±417mA		81/83
VRA0515YMD-10WR3	10W		±15V/±334mA		82/84
VRA0524YMD-10WR3	10W		±24V/±209mA		81/83

URA_YMD-10WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405YMD-10WR3	10W	9-36 (24VDC)	±5V/±1000mA	1500	81/83
URA2409YMD-10WR3	10W		±9V/±555mA		84/86
URA2412YMD-10WR3	10W		±12V/±416mA		85/87
URA2415YMD-10WR3	10W		±15V/±333mA		85/87
URA2424YMD-10WR3	10W		±24V/±208mA		85/87
URA4805YMD-10WR3	10W	18-75 (48VDC)	±5V/±1000mA	1500	81/83
URA4812YMD-10WR3	10W		±12V/±416mA		85/87
URA4815YMD-10WR3	10W		±15V/±333mA		85/87
URA4824YMD-10WR3	10W		±24V/±208mA		85/87

Note:

1. Series with suffix "YMD" are 1*1 packaged with aluminum alloy casing. And for detailed dimension please refer to the illustration.
2. Use "A2S" suffix for chassis mounting and "A4S" suffix for DIN-Rail mounting.
3. The A2S and A4S Model's start-up and minimum input voltages are increased by 1VDC due to the input reverse polarity protection circuit.
4. Products marked with "*" features no Ctrl function.
5. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

URB_YMD-10WR3

RoHS CB Report

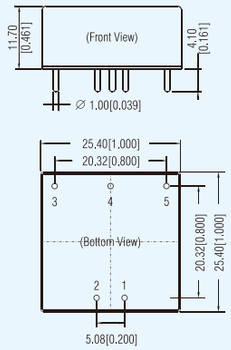
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403YMD-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	1500	76/78
URB2405YMD-10WR3	10W		5V/2000mA		81/83
URB2409YMD-10WR3	10W		9V/1111mA		83/85
URB2412YMD-10WR3	10W		12V/833mA		84/86
URB2415YMD-10WR3	10W		15V/667mA		84/86
URB2424YMD-10WR3	10W		24V/416mA		86/88
URB4803YMD-10WR3	10W	18-75 (48VDC)	3.3V/2400mA	1500	77/79
URB4805YMD-10WR3	10W		5V/2000mA		81/83
URB4812YMD-10WR3	10W		12V/833mA		85/87
URB4815YMD-10WR3	10W		15V/667mA		85/87
URB4824YMD-10WR3	10W		24V/416mA		86/88

Package Dimension

① VRA/B_YMD-6WR3,URA/B_YMD-6WR3

Series: LxWxH: 25.40 × 25.40 × 11.70(mm)



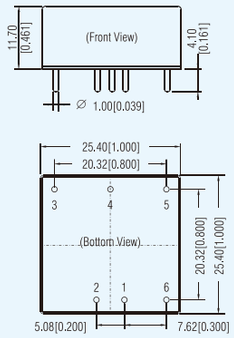
Pin-Out

Pin	Single	Dual
1	GND	GND
2	Vin	Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

② VRA/B_YMD-10WR3, URA/B_YMD-10WR3

Series: LxWxH: 25.40 × 25.40 × 11.70(mm)



Pin-Out

Pin	Single	Dual
1	GND	GND
2	Vin	Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	Ctrl	Ctrl

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Wide Input Voltage 15-30W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature: -40℃ to +85℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- Meet CISPR22/EN55022 CLASS A
- International standard pin-out
- IEC/UL/EN60950, EN62368 approved

A2S Chassis Mounting　　A4S DIN-Rail Mounting

VRB_YMD-15WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1203YMD-15WR3	15W	9-18 (12VDC)	3.3V/4000mA	1500	86/88
VRB1205YMD-15WR3	15W		5V/3000mA		88/90
VRB1212YMD-15WR3	15W		12V/1250mA		88/90
VRB1215YMD-15WR3	15W		15V/1000mA		89/91
VRB1224YMD-15WR3	15W		24V/625mA		89/91
VRB2403YMD-15WR3	15W	18-36 (24VDC)	3.3V/4000mA	1500	86/88
VRB2405YMD-15WR3	15W		5V/3000mA		88/90
VRB2412YMD-15WR3	15W		12V/1250mA		88/90
VRB2415YMD-15WR3	15W		15V/1000mA		89/91
VRB2424YMD-15WR3	15W		24V/625mA		89/91
VRB4803YMD-15WR3	15W	36-75 (48VDC)	3.3V/4000mA	1500	86/88
VRB4805YMD-15WR3	15W		5V/3000mA		88/90
VRB4812YMD-15WR3	15W		12V/1250mA		89/91
VRB4815YMD-15WR3	15W		15V/1000mA		89/91
VRB4824YMD-15WR3	15W		24V/625mA		89/91

VRB_YMD-20WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB1203YMD-20WR3	20W	9-18 (12VDC)	3.3V/5000mA	1500	84/86
VRB1205YMD-20WR3	20W		5V/4000mA		87/89
VRB1212YMD-20WR3	20W		12V/1667mA		87/89
VRB1215YMD-20WR3	20W		15V/1333mA		88/90
VRB1224YMD-20WR3	20W		24V/833mA		88/90
VRB2403YMD-20WR3	20W	18-36 (24VDC)	3.3V/5000mA	1500	86/88
VRB2405YMD-20WR3	20W		5V/4000mA		88/90
VRB2412YMD-20WR3	20W		12V/1667mA		88/90
VRB2415YMD-20WR3	20W		15V/1333mA		89/91
VRB2424YMD-20WR3	20W		24V/833mA		89/91
VRB4803YMD-20WR3	20W	36-75 (48VDC)	3.3V/5000mA	1500	86/88
VRB4805YMD-20WR3	20W		5V/4000mA		88/90
VRB4812YMD-20WR3	20W		12V/1667mA		89/91
VRB4815YMD-20WR3	20W		15V/1333mA		89/91
VRB4824YMD-20WR3	20W		24V/833mA		89/91

URA_YMD-15WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405YMD-15WR3	15W	9-36 (24VDC)	±5V/±1500mA	1500	85/87
URA2412YMD-15WR3	15W		±12V/±625mA		88/90
URA2415YMD-15WR3	15W		±15V/±500mA		88/90
URA2424YMD-15WR3	15W		±24V/±312mA		87/89
URA4805YMD-15WR3	15W	18-75 (48VDC)	±5V/±1500mA	1500	84/86
URA4812YMD-15WR3	15W		±12V/±625mA		87/89
URA4815YMD-15WR3	15W		±15V/±500mA		87/89
URA4824YMD-15WR3	15W		±24V/±312mA		88/90

URA_YMD-20WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405YMD-20WR3	20W	9-36 (24VDC)	±5V/±2000mA	1500	85/87
URA2412YMD-20WR3	20W		±12V/±833mA		88/90
URA2415YMD-20WR3	20W		±15V/±667mA		88/90
URA2424YMD-20WR3	20W		±24V/±417mA		87/89
URA4805YMD-20WR3	20W	18-75 (48VDC)	±5V/±2000mA	1500	84/86
URA4812YMD-20WR3	20W		±12V/±833mA		88/90
URA4815YMD-20WR3	20W		±15V/±667mA		88/90
URA4824YMD-20WR3	20W		±24V/±417mA		88/90

URB_YMD-15WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403YMD-15WR3	15W	9-36 (24VDC)	3.3V/4000mA	1500	86/88
URB2405YMD-15WR3	15W		5V/3000mA		88/90
URB2412YMD-15WR3	15W		12V/1250mA		88/90
URB2415YMD-15WR3	15W		15V/1000mA		89/91
URB2424YMD-15WR3	15W		24V/625mA		89/91
URB4803YMD-15WR3	15W	18-75 (48VDC)	3.3V/4000mA	1500	86/88
URB4805YMD-15WR3	15W		5V/3000mA		88/90
URB4812YMD-15WR3	15W		12V/1250mA		89/91
URB4815YMD-15WR3	15W		15V/1000mA		89/91
URB4824YMD-15WR3	15W		24V/625mA		89/91

URB_YMD-20WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403YMD-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	1500	86/88
URB2405YMD-20WR3	20W		5V/4000mA		88/90
URB2406YMD-20WR3	20W		6V/3333mA		87/89
URB2412YMD-20WR3	20W		12V/1667mA		88/90
URB2415YMD-20WR3	20W		15V/1333mA		89/91
URB2424YMD-20WR3	20W		24V/833mA		89/91
URB4803YMD-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	1500	86/88
URB4805YMD-20WR3	20W		5V/4000mA		88/90
URB4812YMD-20WR3	20W		12V/1667mA		89/91
URB4815YMD-20WR3	20W		15V/1333mA		89/91
URB4824YMD-20WR3	20W		24V/833mA		89/91

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

URA_YMD-30WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA4812YMD-30WR3	30W	18-75 (48VDC)	±12V/±1250mA	1500	86/88
URA4815YMD-30WR3	30W		±15V/±1000mA		86/88
URA4824YMD-30WR3	30W		±24V/±625mA		86/88

Note:

1. Series with suffix "YMD" are 1*1 packaged with aluminum alloy casing. And for detailed dimension please refer to the illustration.
2. Use "A2S" suffix for chassis mounting and "A4S" suffix for DIN-Rail mounting.
3. The A2S and A4S Model's start-up and minimum input voltages are increased by 1VDC due to the input reverse polarity protection circuit.
4. Products marked with "*" features no Ctrl function.
5. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

URB_YMD-30WR3

RoHS

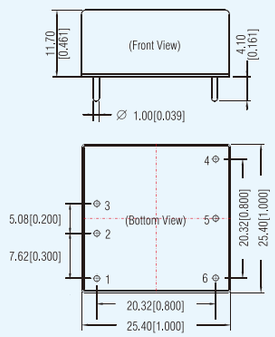
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB4805YMD-30WR3	30W	18-75 (48VDC)	5V/6000mA	1500	86/88
URB4812YMD-30WR3	30W		12V/2500mA		86/88
URB4815YMD-30WR3	30W		15V/2000mA		86/88
URB4824YMD-30WR3	30W		24V/1250mA		86/88

Package Dimension

1 VRB_YMD-15WR3/20WR3, URA/B_YMD-15WR3/20WR3

Series: LxWxH: 25.40 × 25.40 × 11.70(mm)



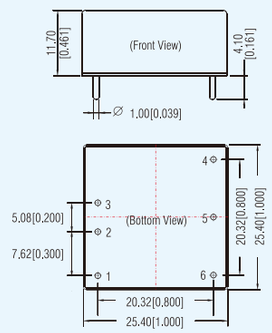
Pin-Out

Pin	Single	Dual
1	Ctrl	Ctrl
2	GND	GND
3	Vin	Vin
4	+Vo	+Vo
5	Trim	OV
6	OV	-Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 URA/B_YMD-30WR3

Series: LxWxH: 25.40 × 25.40 × 11.70(mm)



Pin-Out

Pin	Function
1	Ctrl
2	GND
3	Vin
4	+Vo
5	Trim
6	OV

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Wide Input Voltage 10-20W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature: -40℃ to +85℃
- No-load power consumption as low as 0.11W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- Meet CISPR22/EN55022 CLASS A
- International standard pin-out
- IEC/UL/EN62368 approved

A2S Chassis Mounting A4S DIN-Rail Mounting

URE_LP-10WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URE2405LP-10WR3	10W	9-36 (24VDC)	±5V/±1000mA	3000	79/81
URE2412LP-10WR3	10W		±12V/±416mA		83/85
URE2415LP-10WR3	10W		±15V/±333mA		85/87
URE4805LP-10WR3	10W	18-75 (48VDC)	±5V/±1000mA	3000	80/82
URE4812LP-10WR3	10W		±12V/±416mA		84/86
URE4815LP-10WR3	10W		±15V/±333mA		85/87

URF_LP-20WR3

cULus CE RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF2403LP-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	3000	84/86
URF2405LP-20WR3	20W		5V/4000mA		87/89
URF2409LP-20WR3	20W		9V/2222mA		86/88
URF2412LP-20WR3	20W		12V/1667mA		86/88
URF2415LP-20WR3	20W		15V/1334mA		87/89
URF2418LP-20WR3	20W		18V/1111mA		87/89
URF2424LP-20WR3	20W		24V/833mA		87/89
URF4803LP-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	3000	84/86
URF4805LP-20WR3	20W		5V/4000mA		86/88
URF4812LP-20WR3	20W		12V/1667mA		86/88
URF4815LP-20WR3	20W		15V/1334mA		87/89
URF4824LP-20WR3	20W		24V/833mA		87/89

URF_LP-10WR3

cULus CE RoHS CB Report

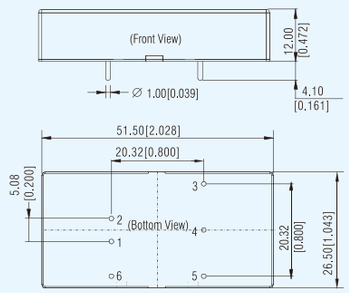
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF2403LP-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	3000	76/78
URF2405LP-10WR3	10W		5V/2000mA		80/82
URF2409LP-10WR3	10W		9V/1111mA		82/84
URF2412LP-10WR3	10W		12V/833mA		82/84
URF2415LP-10WR3	10W		15V/667mA		85/87
URF2424LP-10WR3	10W		24V/416mA		84/86
URF4803LP-10WR3	10W	18-75 (48VDC)	3.3V/2400mA	3000	77/79
URF4805LP-10WR3	10W		5V/2000mA		80/82
URF4812LP-10WR3	10W		12V/833mA		84/86
URF4815LP-10WR3	10W		15V/667mA		85/87
URF4824LP-10WR3	10W		24V/416mA		85/87

Note:
1. Series with suffix "LP" are 2*1 packaged with plastic casing. And for detailed dimension please refer to the illustration.
2. Use "A2S" suffix for chassis mounting and "A4S" suffix for DIN-Rail mounting.
3. The A2S and A4S Model's start-up and minimum input voltages are increased by 1VDC due to the input reverse polarity protection circuit.
4. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

Package Dimension

1 URE/F_LP-10WR3, URF_LP-20WR3 Series: LxWxH: 51.50 × 26.50 × 12.00(mm)



Pin-Out

Pin	URE_LP-10WR3	URF_LP-20WR3	URF_LP-10WR3
1	GND	GND	GND
2	Vin	Vin	Vin
3	+Vo	+Vo	+Vo
4	OV	Trim	No Pin
5	-Vo	0V	0V
6	Ctrl	Ctrl	Ctrl

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Wide Input Voltage 10-30W DIP Package, Dual Isolated & Regulated Output Series

Features:

- 4:1 wide input voltage range
- Dual isolated outputs
- Operating temperature: -40℃ to +85℃ / -40℃ to +105℃
- Input under-voltage, output short-circuit, over-current protection

URD48_YMD-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VDC)	Eff(%) (typ)
URD480505YMD-10WR3	10W	18-75 (48VDC)	5/5V	1000/1000mA	1500	81/84
URD480512YMD-10WR3	10W		5/12V	1000/417mA		82/84
URD480524YMD-10WR3	10W		5/24V	1000/209mA		82/84

URD_LD-20WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VDC)	Eff(%) (typ)
URD480505LD-20WR3	20W	18-75 (48VDC)	5/5V	2000/2000mA	1500	82/84
URD480512LD-20WR3	20W		5/12V	2000/833mA		82/84
URD480524LD-20WR3	20W		5/24V	2000/417mA		82/84

URD_D-30WR3

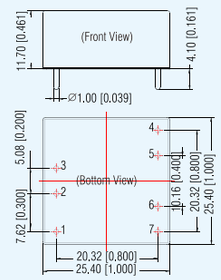
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VAC)	Eff(%) (typ)
URD480524D-30WR3	30W	18-75 (48VDC)	5/24V	4000/417mA	3000	82/84

Package Dimension

1 URD-YMD-10WR3 Series: LxWxH: 25.40x25.40x11.70(mm)

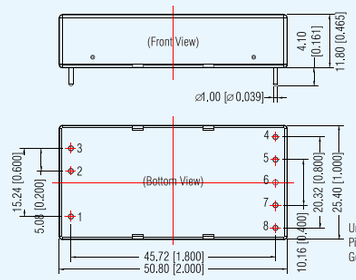


Pin-Out

Pin	Function
1	Ctrl
2	GND
3	Vin
4	+VO2
5	OV2
6	OV1
7	+VO1

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 URD-LD-20WR3 Series: LxWxH: 50.80x25.40x11.80(mm)

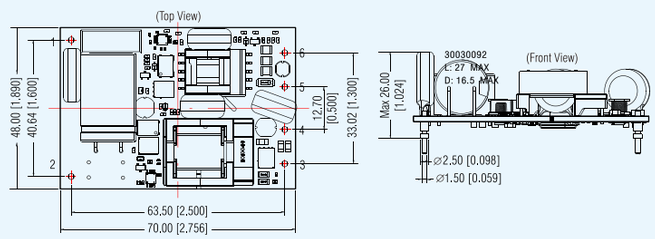


Pin-Out

Pin	Function
1	Ctrl
2	GND
3	Vin
4	+VO2
5	OV2
6	NO Pin
7	OV1
8	+VO1

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

3 URD480524LD-30WR3 Series: LxWxH: 70.00x48.00x26.00(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
3	Vo1+
4	Vo1-
5	Vo2-
6	Vo2+

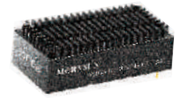
Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Please do not use fan power other devices

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Wide Input Voltage 15-40W DIP Package, Isolated & Regulated Output Series

Features:

- Suitable for DCS, battery-powered device, communication, distributed power system, D/A hybrid system, RTU and industrial robot system applications
- Operating temperature: -40℃ to +85℃ / -40℃ to +105℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protection
- International standard pin-out
- IEC/UL/EN/60950, EN62368 approved



"H" Horizontal package with heat sink

A2S Chassis Mounting

A4S DIN-Rail Mounting

VRB_LD-15WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB2405LD-15WR3	15W	18-36 (24VDC)	5V/3000mA	1500	87/89
VRB2412LD-15WR3	15W		12V/1250mA		87/89
VRB2415LD-15WR3	15W		15V/1000mA		87/89
VRB2424LD-15WR3	15W		24V/625mA		88/90
VRB4803LD-15WR3	15W	36-75 (48VDC)	3.3V/4000mA	1500	81/83
VRB4805LD-15WR3	15W		5V/3000mA		86/88
VRB4812LD-15WR3	15W		12V/1250mA		86/88
VRB4815LD-15WR3	15W		15V/1000mA		87/89
VRB4824LD-15WR3	15W		24V/625mA		87/89

VRA_LD-20WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRA1215LD-20WR3	20W	9-18 (12VDC)	±15V/±667mA	1500	85/87
VRA1224LD-20WR3	20W		±24V/±417mA		86/88
VRA2405LD-20WR3	20W	18-36 (24VDC)	±5V/±2000mA	1500	82/84
VRA2409LD-20WR3	20W		±9V/±1111mA		84/86
VRA2412LD-20WR3	20W		±12V/±834mA		84/86
VRA2415LD-20WR3	20W		±15V/±667mA		84/86
VRA2424LD-20WR3	20W		±24V/±417mA		84/86
VRA4805LD-20WR3	20W	36-75 (48VDC)	±5V/±2000mA	1500	84/86
VRA4812LD-20WR3	20W		±12V/±834mA		86/88
VRA4815LD-20WR3	20W		±15V/±667mA		87/89

VRB_LD-20WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB121DLD-20WR3	20W	9-18 (12VDC)	110V/182mA	1500	86/88
VRB2403LD-20WR3	20W	18-36 (24VDC)	3.3V/5000mA	1500	84/86
VRB2405LD-20WR3	20W		5V/4000mA		88/90
VRB2409LD-20WR3	20W		9V/2222mA		85/87
VRB2412LD-20WR3	20W		12V/1667mA		85/87
VRB2415LD-20WR3	20W		15V/1333mA		86/88
VRB2424LD-20WR3	20W		24V/834mA		86/88
VRB4803LD-20WR3	20W	36-75 (48VDC)	3.3V/5000mA	1500	84/86
VRB4805LD-20WR3	20W		5V/4000mA		88/90
VRB4809LD-20WR3	20W		9V/2222mA		87/89
VRB4812LD-20WR3	20W		12V/1667mA		87/89
VRB4815LD-20WR3	20W		15V/1333mA		88/90
VRB4824LD-20WR3	20W		24V/834mA		88/90

URA_LD-20WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405LD-20WR3	20W	9-36 (24VDC)	±5V/±2000mA	1500	84/86
URA2409LD-20WR3	20W		±9V/±1111mA		86/88
URA2412LD-20WR3	20W		±12V/±834mA		86/88
URA2415LD-20WR3	20W		±15V/±667mA		86/88
URA4805LD-20WR3	20W	18-75 (48VDC)	±5V/±2000mA	1500	84/86
URA4815LD-20WR3	20W		±12V/±834mA		86/88
URA4824LD-20WR3	20W		±15V/±667mA		87/89

URB_LD-20WR3

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403LD-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	1500	84/86
URB2405LD-20WR3	20W		5V/4000mA		86/88
URB2409LD-20WR3	20W		9V/2222mA		87/89
URB2412LD-20WR3	20W		12V/1667mA		87/89
URB2415LD-20WR3	20W		15V/1333mA		88/90
URB2424LD-20WR3	20W		24V/834mA		88/90
URB4803LD-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	1500	84/86
URB4805LD-20WR3	20W		5V/4000mA		84/86
URB4809LD-20WR3	20W		9V/2222mA		87/89
URB4812LD-20WR3	20W		12V/1667mA		85/87
URB4815LD-20WR3	20W		15V/1333mA		88/90
URB4824LD-20WR3	20W		24V/834mA		86/88

VRB_LD-30WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB2403LD-30WR3	30W	18-36 (24VDC)	3.3V/6000mA	1500	83/85
VRB2405LD-30WR3	30W		5V/6000mA		86/88
VRB2409LD-30WR3	30W		9V/3333mA		84/86
VRB2412LD-30WR3	30W		12V/2500mA		86/88
VRB2415LD-30WR3	30W		15V/2000mA		88/90
VRB2424LD-30WR3	30W		24V/1250mA		88/90
VRB4803LD-30WR3	30W	36-75 (48VDC)	3.3V/6000mA	1500	84/86
VRB4805LD-30WR3	30W		5V/6000mA		86/88
VRB4812LD-30WR3	30W		12V/2500mA		86/88
VRB4815LD-30WR3	30W		15V/2000mA		87/89
VRB4824LD-30WR3	30W		24V/1250mA		87/89

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URA_LD-30WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA2405LD-30WR3	30W	9-36 (24VDC)	±5V/±3000mA	1500	84/86
URA2412LD-30WR3	30W		±12V/±1250mA		87/89
URA2415LD-30WR3	30W		±15V/±1000mA		87/89
URA2424LD-30WR3	30W		±24V/±625mA		87/89
URA4805LD-30WR3	30W	18-75 (48VDC)	±5V/±3000mA	1500	84/86
URA4812LD-30WR3	30W		±12V/±1250mA		86/88
URA4815LD-30WR3	30W		±15V/±1000mA		86/88

VRB_LD-40WHR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB2405LD-40W(H)R3	40W	18-36 (24VDC)	5V/8000mA	1500	86/88
VRB2412LD-40W(H)R3	40W		12V/3333mA		88/90
VRB2415LD-40W(H)R3	40W		15V/2667mA		90/91
VRB2424LD-40W(H)R3	40W		24V/1667mA		90/91
VRB4812LD-40W(H)R3	40W	36-75 (48VDC)	12V/3333mA	1500	88/90
VRB4815LD-40W(H)R3	40W		15V/2667mA		90/91
VRB4824LD-40W(H)R3	40W		24V/1667mA		90/91

URB_LD-30WR3

RoHS CB Report

Product Program

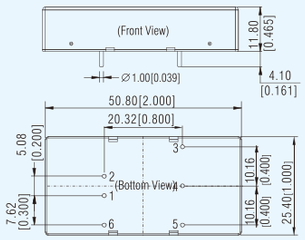
Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB2403LD-30WR3	30W	9-36 (24VDC)	3.3V/6000mA	1500	83/85
URB2405LD-30WR3	30W		5V/6000mA		84/86
URB2409LD-30WR3	30W		9V/3333mA		86/88
URB2412LD-30WR3	30W		12V/2500mA		88/90
URB2415LD-30WR3	30W		15V/2000mA		88/90
URB2424LD-30WR3	30W		24V/1250mA		88/90
URB4803LD-30WR3	30W	18-75 (48VDC)	3.3V/6000mA	1500	84/86
URB4805LD-30WR3	30W		5V/6000mA		85/87
URB4812LD-30WR3	30W		12V/2500mA		86/88
URB4815LD-30WR3	30W		15V/2000mA		87/89
URB4824LD-30WR3	30W		24V/1250mA		85/87

Note:

1. Use "H" suffix for heat sink mounting, "A2S" suffix for chassis mounting and "A4S" suffix for DIN-Rail mounting. And for detailed dimension please contact our sales or refer to the datasheet. These extended series feature input reverse polarity protection.
2. Series with suffix "LD" are 2*1 packaged with aluminum alloy casing. And for detailed dimension please refer to the illustration.
3. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

Package Dimension

① VRB_LD-15WR3 Series: LxWxH: 50.80 × 25.40 × 11.80(mm)

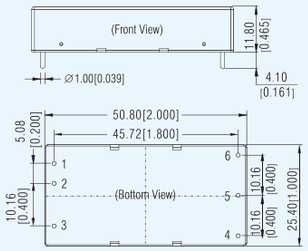


Pin-Out

Pin	Single	Dual
1	GND	GND
2	Vin	Vin
3	+Vo	+Vo
4	Trim	0V
5	0V	-Vo
6	Ctrl	Ctrl

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

② VRB_LD-30WR3 Series: LxWxH: 50.80 × 25.40 × 11.80(mm)

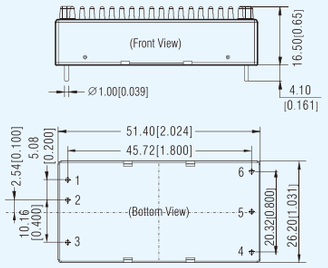


Pin-Out

Pin	Single	Dual
1	Vin	Vin
2	GND	GND
3	Ctrl	Ctrl
4	Trim	-Vo
5	0V	0V
6	+Vo	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

③ VRB_LD-40WHR3 Series: LxWxH: 51.40 × 26.20 × 16.50(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
3	Ctrl
4	Trim
5	0V
6	+Vo

Unit:mm[inch]
General tolerances: ±0.50[±0.020]

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Wide Input Voltage 75-350W DIP Package, Isolated & Regulated Output Series

Features:

- Wide input voltage range (2:1 / 4:1)
- Efficiency up to 94%
- Isolation voltage 2250VDC
- Input under-voltage, output over-voltage, over-current, short-circuit, over-temperature protection
- Operating temperature: -40℃ to +85℃
- Five-sided metal shielding package
- International standard 1/4 brick
- EN62368 approved

"F" Package with aluminum base

"H" Horizontal package with heat sink

"A5" Chassis Mounting

URF_QB-75WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF4805QB-75WR3	75W	18-75 (48VDC)	5V/15000mA	2250	89/91
URF4812QB-75WR3	75W		12V/6250mA		90/92
URF4815QB-75WR3	75W		15V/5000mA		91/93
URF4824QB-75WR3	75W		24V/3125mA		90/92
URF4848QB-75WR3	75W		48V/1563mA		90/92

URF_QB-100WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF2405QB-100WR3	100W	9-36 (24VDC)	5V/20000mA	2250	87/89
URF2412QB-100WR3	100W		12V/8300mA		88/90
URF2415QB-100WR3	100W		15V/6700mA		88/90
URF2424QB-100WR3	100W		24V/4200mA		88/90
URF2428QB-100WR3	100W		28V/3600mA		88/90
URF2448QB-100WR3	100W		48V/2100mA		88/90
URF4803QB-100WR3	100W	18-75 (48VDC)	3.3V/22700mA	2250	86/88
URF4805QB-100WR3	100W		5V/20000mA		89/91
URF4812QB-100WR3	100W		12V/8300mA		90/92
URF4815QB-100WR3	100W		15V/6700mA		91/93
URF4824QB-100WR3	100W		24V/4200mA		90/92
URF4848QB-100WR3	100W		48V/2100mA		90/92

Note:
1. Use "F" suffix for products with aluminum base, "H" suffix for heat sink mounting. We recommend choosing modules with a heat sink for applications that require high requirements for temperature.
2. "A5": Chassis Mounting
3. "A6": DIN-Rail Mounting

URF_QB-150WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF4805QB-150WR3	150W	18-75 (48VDC)	5V/30000mA	2250	86/88
URF4812QB-150WR3	150W		12V/12500mA		89/91
URF4815QB-150WR3	150W		15V/10000mA		87/89
URF4824QB-150WR3	150W		24V/6250mA		89/91
URF4848QB-150WR3	150W		48V/3130mA		89/91

URF_QB-200WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF4805QB-200WR3	200W	18-75 (48VDC)	5V/40000mA	2250	86/88
URF4812QB-200WR3	200W		12V/16700mA		89/91
URF4815QB-200WR3	200W		15V/13300mA		87/89
URF4824QB-200WR3	200W		24V/8400mA		89/91
URF4848QB-200WR3	200W		48V/4200mA		89/91

VRB_HB-350WR3

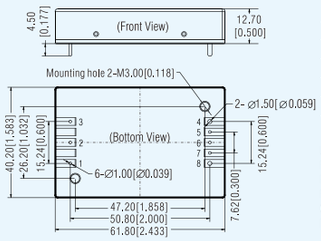
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
VRB2412HB-350WR3	288W	20-36 (24VDC)	12V/24A	1500	83/86
VRB2424HB-350WR3	350W		24V/14.5A		85/87
VRB2428HB-350WR3	350W		28V/12.5A		87/89
VRB2432HB-350WR3	350W		32V/11A		87/89

Package Dimension

① URF_QB-75WR3/URF_QB-150WR3/URF_QB-100WR3 /URF_QB-200WR3 Series: LxWxH: 61.80x40.20x12.70(mm)

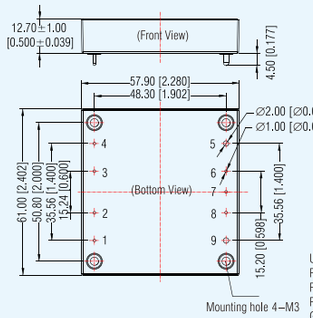


Pin-Out

Pin	Function	Pin	Function
1	+Vin	5	Sense-
2	Ctrl	6	Trim
3	-Vin	7	Sense+
4	0V	8	+Vo

Unit:mm[inch]
Pin 1,2,3,5,6, 7´s diameter:1.00[0.039]
Pin 4,8´sdiameter: 1.50[0.059]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

② VRB_HB-350WR3 Series: LxWxH: 61.0 × 57.9 × 12.7(mm)



Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	NC
4	-Vin
5	0V
6	Sense-
7	Trim
8	Sense+
9	+Vo

Unit:mm[inch]
Pin 1,2,3,5,6, 7,8´s diameter:1.00[0.039]
Pin 5,9´sdiameter: 1.50[0.059]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

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Ultra-wide Input Voltage 1-3W Isolated & Regulated Output Series

Features:

- Widely used in medical, industrial control, electric power, instrumentation, communication applications
- Ultra-wide input voltage range (8:1)
- Efficiency up to 74%
- No-load power consumption as low as 0.12W
- Isolation voltage 3000VDC
- Operating temperature: -40℃ to +105℃
- Input under-voltage, output short-circuit, over-current protection
- International standard pin-out
- EN62368 approved

UWE_S-1WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
UWE1205S-1WR3	1W	4.5-36 (12VDC)	±5V/±100mA	3000	69/71
UWE1212S-1WR3	1W		±12V/±42mA		72/74
UWE1215S-1WR3	1W		±15V/±33mA		72/74

UWF_S-1WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
UWF1205S-1WR3	1W	4.5-36 (12VDC)	5V/200mA	3000	69/71
UWF1209S-1WR3	1W		9V/111mA		69/72
UWF1212S-1WR3	1W		12V/83mA		72/74
UWF1215S-1WR3	1W		15V/67mA		72/74

UWE_S-3WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
UWE1205S-3WR3	3W	4.5-36 (12VDC)	±5V/±300mA	3000	75/77
UWE1212S-3WR3	3W		±12V/±125mA		77/79
UWE1215S-3WR3	3W		±15V/±100mA		77/79

UWF_S-3WR3

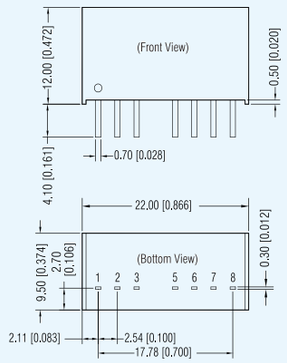
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
UWF1205S-3WR3	3W	4.5-36 (12VDC)	5V/600mA	3000	75/77
UWF1212S-3WR3	3W		12V/250mA		77/79
UWF1215S-3WR3	3W		15V/200mA		77/79

Package Dimension

① UWE/F_S-1WR3, UWE/F_S-3WR3 Series: LxWxH: 22.00 × 9.50 × 12.00(mm)



Pin-Out

Pin	Single	Dual
1	GND	GND
2	Vin	Vin
3	NC	NC
5	NC	NC
6	+Vo	+Vo
7	0V	0V
8	NC	-Vo

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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High Voltage 0.625-40W Fixed Input Voltage, Non-isolated & Regulated High Voltage Output Series

Features

- Suitable for medical, security and some special equipment industry such as ultrasonic flaw detector, photomultiplier tubes, piezoelectric devices, capacitor charging, etc.
- Utra-wide output voltage range: 0-2000VDC
- Input under-voltage, output short-circuit, over-voltage protection
- Low ripple, low power consumption
- Constant current output

HO1-P(N)1251V-0.5C(F)

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P1251V-0.5C	0.625W	10.8-13.2 (12VDC)	+1250	0 to +1250	0.5/0
HO1-N1251V-0.5C	0.625W		−1250	0 to −1250	
HO1-P1251V-0.5F	0.625W	21.6-26.4 (24VDC)	+1250	0 to +1250	0.5/0
HO1-N1251V-0.5F	0.625W		−1250	0 to −1250	

HO1-P(N)1251H-1B

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P1251H-1B	0.75W	4.75-5.25 (5VDC)	+1250	0 to +1250	1/0
HO1-N1251H-1B	0.75W		−1250	0 to −1250	

HO1-P(N)1501H-0.5C(D)

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P1501H-0.5C	0.75W	10.8-13.2 (12VDC)	+1500	0 to +1500	0.5/0
HO1-N1501H-0.5C	0.75W		−1500	0 to −1500	
HO1-P1501H-0.5D	0.75W	13.5-16.5 (15VDC)	+1500	0 to +1500	0.5/0
HO1-N1501H-0.5D	0.75W		−1500	0 to −1500	

HO1-P401V-5C

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P401V-5C	2W	10.8-13.2 (12VDC)	+400	0 to +400	5/0

HO1-P102-30F

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P102-30F	30W	21.6-26.4 (24VDC)	+1000	0 to +1000	30/0

HO1-P202-20D

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P202-20D	40W	14-18 (16VDC)	+2000	0 to +2000	20

Note: Customization for different input voltage, output voltage and power range is acceptable.

HO1-P(N)1251S-0.5C

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P1251S-0.5C	0.625W	10.8-13.2 (12VDC)	1250	0 to +1250	0.5
HO1-N1251S-0.5C			-1250	0 to - 1250	

HO1-P(N)1201-0.6B

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P1201-0.6B	0.72W	10.8-13.2 (12VDC)	+1200	0 to +1200	0.6/0
HO1-N1201-0.6B	0.72W		−1200	0 to −1200	

HO1-P(N)1251H-0.5C(D/F)

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P1251H-0.5C	0.75W	10.8-13.2 (12VDC)	+1250	0 to +1250	0.5/0
HO1-N1251H-0.5C	0.75W		−1250	0 to −1250	
HO1-P1251H-0.5D	0.75W	13.5-16.5 (15VDC)	+1250	0 to +1250	0.5/0
HO1-N1251H-0.5D	0.75W		−1250	0 to −1250	
HO1-P1251H-0.5F	0.75W	21.6-26.4 (24VDC)	+1250	0 to +1250	0.5/0
HO1-N1251H-0.5F	0.75W		−1250	0 to −1250	

HO1-P601-2C

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P601-2C	1.2W	10.8-13.2 (12VDC)	+600	0 to +600	2/0

HO1-P102-10F

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P102-10F	10W	21.6-26.4 (24VDC)	+1000	0 to +1000	10/0

HO1-P102-20D

RoHS

Product Program

Model Number	Power	Input Voltage (VDC) Nominal (Range)	Output Voltage (VDC) Max.	Output Voltage (VDC) Range	Output Current (mA)
HO1-P102-20D	40W	14-18 (16VDC)	+1000	0 to +1000	20

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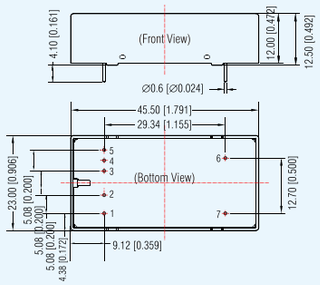
Package Dimension

1 HO1-P(N)1251V-0.5C(F)/HO1-P(N)1251H-0.5C(D/F)

Series: LxWxH: 45.50 x 23.00 x 12.50(mm)

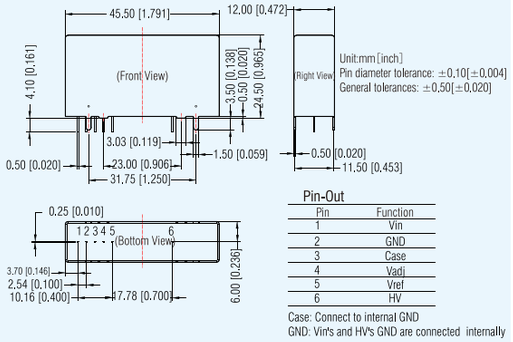


Pin-Out

Pin	Function
1	+Vin
2	GND
3	No Pin
4	Adj
5	Vref
6	H.V.
7	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 HO1-P(N)1251S-0.5C Series: LxWxH: 45.50 x 12.00 x 24.50(mm)



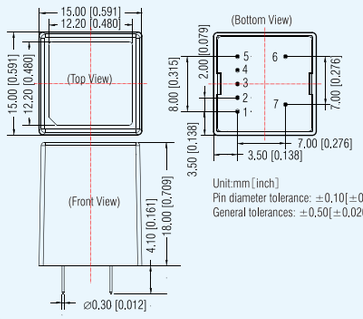
Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Pin-Out

Pin	Function
1	Vin
2	GND
3	Case
4	Vadj
5	Vref
6	HV

Case: Connect to internal GND
GND: Vin's and HV's GND are connected internally

3 HO1-P(N)1201-0.6B Series: LxWxH: 15.00 x 15.00 x 18.00(mm)



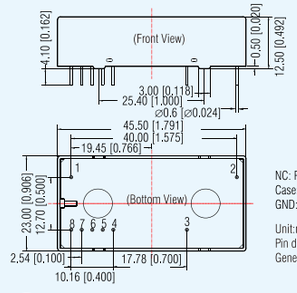
Pin-Out

Pin	Function
1	Vin
2	GND
3	Vadj-GND
4	Vadj
5	Vref
6	HV-GND
7	HV

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

4 HO1-P(N)1251H-1BHO1-P(N)1501H-0.5C(D)

Series: LxWxH: 45.50 x 23.00 x 12.50(mm)



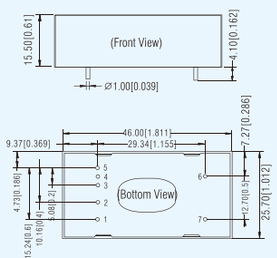
Pin-Out

Pin	Function
1,2	NC
3	HV
4	Vref
5	Vadj
6	Case
7	GND
8	Vin

NC: Pin to be isolated from circuit
Case: Case is connected to the internal GND
GND: Vin's and HV's GND are connected internally

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

5 HO1-P601-2C Series: LxWxH: 46.00 x 25.70 x 15.50(mm)

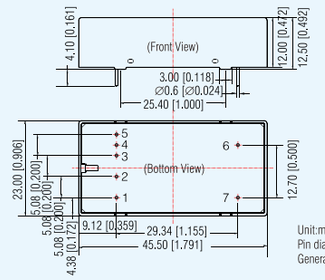


Pin-Out

Pin	Function
1	Vin
2	GND
3	No Pin
4	Adj
5	Vref
6	HV
7	HGND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

6 HO1-P401V-5C Series: LxWxH: 45.50 x 23.00 x 12.50(mm)



Pin-Out

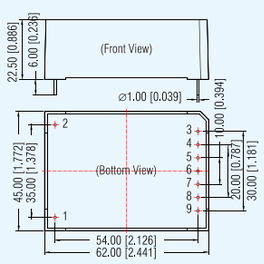
Pin	Function
1	Vin
2	GND
3	R/S
4	Vadj
5	Vref
6	HV
7	GND

GND: Vin's and HV's GND are connected internally

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

7 HO1-P102-10F/HO1-P102-30F

Series: LxWxH: 62.00 × 45.00 ×22.50(mm)



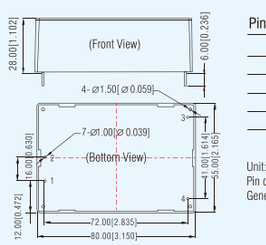
Pin-Out

Pin	Function
1	HGND
2	HV
3	Vin
4	GND
5	GND1
6	Adj
7	Vref
8	Idis
9	Vdis

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

8 HO1-P102-20D/HO1-P202-20D

Series: LxWxH: 80.00 × 55.00 × 28.00(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
3	H.V.
4	HGND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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Ultra-wide, Ultra-high Input Voltage 5-200W

100-1200VDC Input Voltage, Isolated & Regulated Output Series

Features

- Ultra-wide input voltage, widely used in PV & HVC applications
- Ultra-wide input voltage range: 100-1200VDC
- Operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC / 4000VDC (PV40-27B)
- Efficiency up to 85%
- Input reverse voltage, over-voltage, output short-circuit protection
- EN62109 approved
- Optional package: chassis mounting, DIN-Rail mounting
- High reliability, long lifespan, 3 years warranty

PV05/10/15-27BxxR2

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV05-27B05R2	5W	100-1000	5V/1000mA	4000	72
PV10-27B05R2	10W	100-1000	5V/2000mA	4000	72
PV10-27B09R2	10W	100-1000	9V/1110mA	4000	76
PV10-27B24R2	10W	100-1000	24V/420mA	4000	80
PV15-27B12R2	15W	100-1000	12V/1250mA	4000	77
PV15-27B15R2	15W	100-1000	15V/1000mA	4000	78
PV15-27B24R2	15W	100-1000	24V/625mA	4000	80

Note:
1. Chassis mounting series: with the suffix "A2C"
2. DIN-Rail mounting series: with the suffix "A4C"
3. Series with "A2C" / "A4C" packages are CE certified.

PV40-27B

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
PV40-27B12	40W	200-1200	12V/3330mA	4000	83
PV40-27B15	40W		15V/2670mA		84
PV40-27B24	40W		24V/1670mA		84

Note:
1. Chassis mounting series: with the suffix "A5".
2. DIN-Rail mounting series: with the suffix "A6".

PV10-27C

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV10-27C050524	10W	200-1200	5V/1000mA 5V/400mA 24V/100mA	4000	72

PV60-27D

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV60-27D1215-13	60W	200-1100	12V/3000mA 15V/1330mA	4000	85

PV120-27B

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV120-27B12	90W	200-1100	12V/7.550A	4000	84
PV120-27B15	100W	200-1100	15V/6.670A	4000	85
PV120-27B24	120W	200-1100	24V/5.000A	4000	87
PV120-27B26	120W	200-1100	26V/4.616A	4000	87
PV120-27B28	120W	200-1100	28V/4.286A	4000	87
PV120-27B48	120W	200-1100	48V/2.500A	4000	89

PV200-27B

CE RoHS

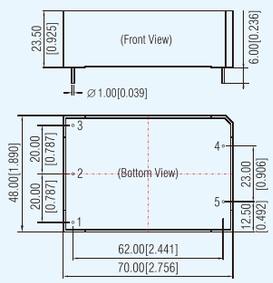
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV200-27B12	120W	200-1000	12V/10A	4000	86
PV200-27B15	150W	200-1000	15V/10A	4000	87
PV200-27B24	200W	200-1000	24V/8.333A	4000	87
PV200-27B26	200W	200-1000	26V/7.692A	4000	87
PV200-27B48	200W	200-1000	48V/4.166A	4000	87

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 PV05/10/15-27BxxR2 Series: LxWxH: 70.0 x 48.0 x 23.5(mm)



Pin-Out

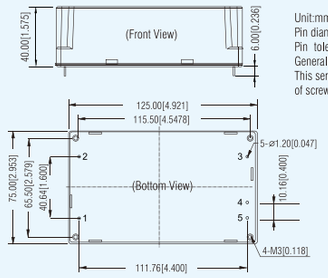
Pin	Function
1	NC
2	-Vin
3	+Vin
4	+Vo
5	-Vo

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Note: A2 chassis mounting and A4 DIN-Rail mounting is available for these products.
For detailed dimensions and layout please refer to the datasheet.

2 PV40-27B/29B Series: LxWxH: 89.0 x 63.5 x 25.0(mm)

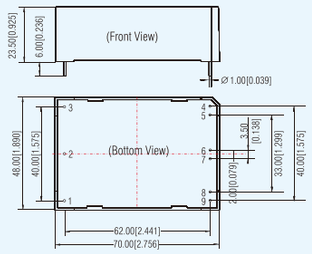


Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
Pin tolerances(H): ±0.50±0.059]
General tolerances: ±0.50[±0.020]
This series of products must increase the fixing of screws in the harsh vibration environment.

Pin-Out

Pin	Function
1	-Vin
2	+Vin
3	NC
4	-Vo
5	+Vo

3 PV10-27C Series: LxWxH: 70.0 x 48.0 x 23.5(mm)

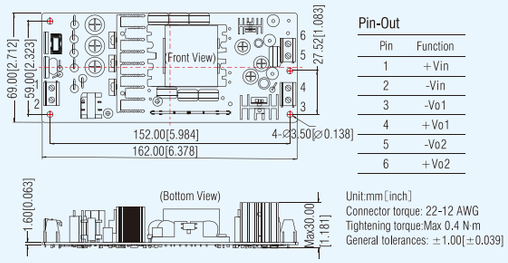


Pin-Out

Pin	Function
1	-Vin
2	No pin
3	+Vin
4	+Vo3
5	-Vo3
6	+Vo2
7	-Vo2
8	+Vo1
9	-Vo1

Note:
Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

4 PV60-27D Series: LxWxH: 162.00x69.00x32.00(mm)

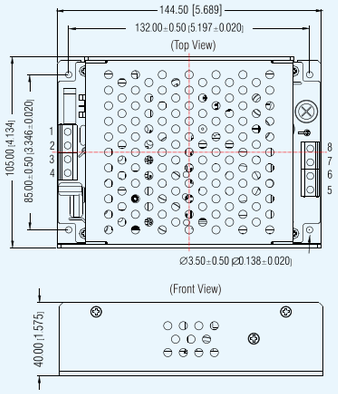


Pin-Out

Pin	Function
1	+Vin
2	-Vin
3	-Vo1
4	+Vo1
5	-Vo2
6	+Vo2

Unit:mm[inch]
Connector torque: 22-12 AWG
Tightening torque:Max 0.4 N·m
General tolerances: ±1.00[±0.039]

5 PV120-27B Series: LxWxH: 144.50x105.00x40.00(mm)

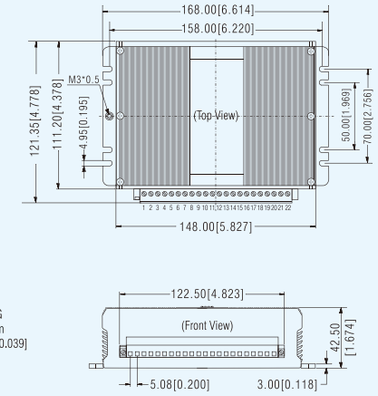


Pin-Out

Pin	Function
1	+Vin
2	NC
3	-Vin
4	PE
5,6	-Vo
7,8	+Vo

Unit:mm[inch]
Connector torque: 22-12 AWG
Tightening torque:Max 0.4 N·m
General tolerances: ±1.00[±0.039]

6 PV200-27B Series: LxWxH: 168.00 x 110.00 x 45.00(mm)



Pin-Out

Pin	Function	Pin	Function
1	Vin+	12	NC
2	NC	13	NC
3	NC	14	NC
4	Vin-	15	NC
5	NC	16	Trim
6	NC	17	Vo-
7	PE	18	Vo-
8	NC	19	Vo-
9	NC	20	Vo+
10	NC	21	Vo+
11	NC	22	Vo+

Unit:mm[inch]
General tolerances: ±1.00[±0.039]
Wire range:28-12AWG

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Ultra-wide, Ultra-high Input Voltage 15-200W

150-1500VDC Input Voltage, Isolated & Regulated Output Series

Features:

- Ultra-wide input voltage, widely used in PV & HVC applications
- Ultra-wide input voltage range: 150-1500VDC
- Isolation voltage 4000VAC
- Efficiency up to 80%
- Input under-voltage, reverse input voltage, output short-circuit, over-current, over-voltage protection
- High reliability, long lifespan, 3 years warranty
- Compact size and cost-effective series available
- UL1741, CSA-C22.2 No.107.1, EN62109 approved
- Optional package: PCB mounting, DIN-Rail mounting
- Operating altitude up to 5000m

PV15-29BxxL

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV15-29B05L	10W	200-1500	5V/2000mA	4000	70
PV15-29B12L	15W	200-1500	12V/1250mA	4000	76
PV15-29B15L	15W	200-1500	15V/1000mA	4000	77
PV15-29B24L	15W	200-1500	24V/625mA	4000	79

Note:
1. Chassis mounting series: with the suffix "A5". 2. DIN-Rail mounting series: with the suffix "A6".

PV15-29BxxR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV15-29B05R3	10W	200-1500	5V/2000mA	4000	64
PV15-29B12R3	15W	200-1500	12V/1250mA	4000	71
PV15-29B15R3	15W	200-1500	15V/1000mA	4000	80
PV15-29B24R3	15W	200-1500	24V/625mA	4000	83

Note:
1. Chassis mounting series: with the suffix "A5". 2. DIN-Rail mounting series: with the suffix "A6".

PV40-29B

RoHS CB Report

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV40-29B12	40W	200-1500	12V/3330mA	4000	78
PV40-29B15	40W		15V/2670mA		82
PV40-29B24	40W		24V/1670mA		83

Note:
DIN-Rail mounting series: with the suffix "A8" or "A10". A8 series have built-in high-voltage fuses and EMC filter modules.

PV150-29B

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV150-29B12	120W	250-1500	12V/10000mA	4000	84
PV150-29B15	120W	250-1500	15V/8000mA	4000	85
PV150-29B24	150W	250-1500	24V/6250mA	4000	87
PV150-29B32	150W	250-1500	32V/4690mA	4000	87
PV150-29B48	150W	250-1500	48V/3125mA	4000	88
PV150-29B28	150W	250-1500	28V/5360mA	4000	87

PV200-29B

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV200-29B24	200W	300-1500	24V/8.4A	4000	86
PV200-29B48	200W	300-1500	48V/4.2A	4000	87
PV200-29B32	200W	300-1500	32V/6.25A	4000	87

PV15-29C

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV15-29C050505	15W	200-1500	Vo1/Io1: 5V/1500mA Vo2/Io2: 5V/800mA Vo3/Io3: 5V/400mA	4000	76
PV15-29C050524	15W	200-1500	Vo1/Io1: 5V/1500mA Vo2/Io2: 5V/600mA Vo3/Io3: 24V/150mA	4000	76

PV45-29D

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV45-29D1508-06	45W	150-1500	Vo1/Io1: 15V/2.66A Vo2/Io2: 8V/0.625A	4000	78
PV45-29D1505-10	45W	150-1500	Vo1/Io1: 15V/2.66A Vo2/Io2: 5V/1A	4000	78
PV45-29D1515-15	45W	150-1500	Vo1/Io1: 15V/1.53A Vo2/Io2: 15V/1.53A	4000	78

PV50-29D

RoHS

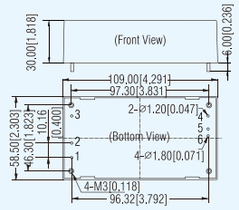
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
PV50-29D1505-20	50W	150-1500	Vo1/Io1: 15V/2.66A Vo2/Io2: 5V/2A	4000	78

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 PV15-29BxxL Series: LxWxH: 109.00x58.50x30.00(mm)

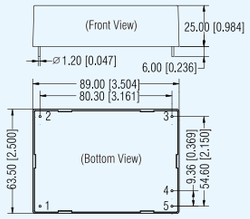


Pin-Out

Pin	Function	Pin	Function
1	+Vin	4	NC
2	-Vin	5	-Vo
3	NC	6	+Vo

Unit:mm[inch]
Pin 1,2,3,5, 6´s diameter:1.00[0.039]
Pin 3,4´sdiameter: 1.20[0.047]
Pin diameter tolerance: ±0.10[±0.004]
Pin tolerances(H): ±1.50[±0.059]
General tolerances: ±0.50[±0.020]
This series of products must increase the fixing of screws in the harsh vibration environment.

2 PV15-29BxxR3 Series: LxWxH: 89.00x63.50x25.00(mm)

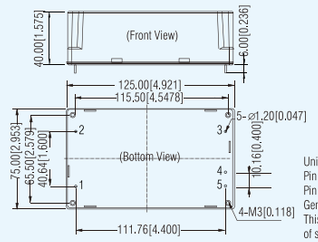


Pin-Out

Pin	Function
1	-Vin
2	+Vin
3	NC
4	-Vo
5	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

3 PV40-29B Series: LxWxH: 125.00x75.00x40.00(mm)

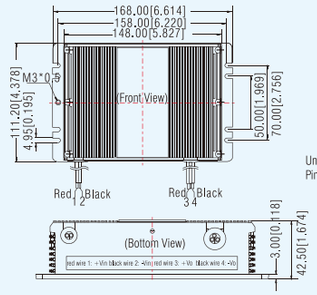


Pin-Out

Pin	Function
1	-Vin
2	+Vin
3	NC
4	-Vo
5	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
Pin tolerances(H): ±1.50[±0.059]
General tolerances: ±0.50[±0.020]
This series of products must increase the fixing of screws in the harsh vibration environment.

4 PV150-29B Series: LxWxH: 168.00x111.20x42.50(mm)

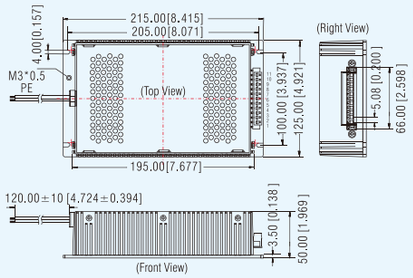


Pin-Out

Pin	Function
1	+Vin
2	-Vin
3	+Vo
4	-Vo
5	PE

Unit:mm[inch]
Pin diameter tolerance: ±1.00[±0.039]

5 PV200-29B Series: LxWxH: 215.00 x 125.00 x 50.00(mm)

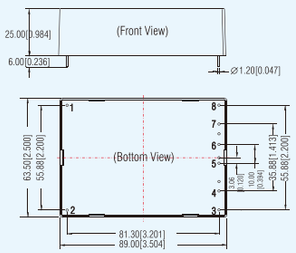


Pin-Out

Pin	Function
red line(14AWG)	Vin+
black line(14AWG)	Vin-
1	Vo-
2	Vo-
3	Vo-
4	Vo-
5	NC
6	Vo+
7	Vo+
8	Vo+
9	Vo+
10	Trim
11	Trim

Unit:mm[inch]
Connector torque: 22-12 AWG
Tightening torque:Max 0.4 N·m
General tolerances: ±1.00[±0.039]

6 PV15-29C Series: LxWxH: 89.00x63.50x25.00(mm)

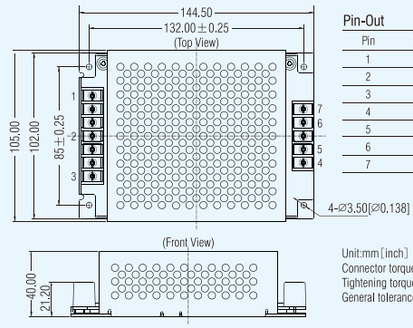


Pin-Out

Pin	Function
1	+Vin
2	-Vin
3	-Vo1
4	+Vo1
5	-Vo2
6	+Vo2
7	-Vo3
8	+Vo3

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

7 PV45-29D Series: LxWxH: 144.5.00x105.00x40.00(mm)

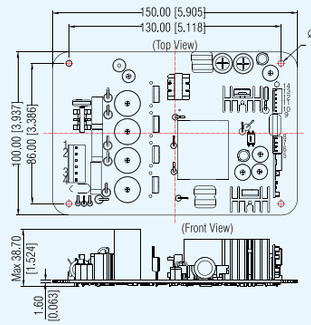


Pin-Out

Pin	Function
1	-Vin
2	+Vin
3	⏚
4	-Vo2
5	+Vo2
6	-Vo1
7	+Vo1

Unit:mm[inch]
Connector torque: 22-12 AWG,4.0mm²
Tightening torque:Max 0.4 N·m
General tolerances: ±1.00[±0.039]

8 PV50-29D Series: LxWxH: 150.00 x 100.00 x 38.70(mm)



Pin-Out

Pin	Function
1	-Vin
2	-Vin
3	+Vin
4	+Vin
5	-Vo2
6	-Vo2
7	+Vo2
8	+Vo2
9	-Vo1
10	-Vo1
11	-Vo1
12	+Vo1
13	+Vo1
14	+Vo1

Unit:mm[inch]
Pin manufacturer:Dongguan KD New Energy Technology CO.,LTD
CN1 VH 3.96-6P(NO mid-2P)
CN2 2.54-4P
CN3-2.54-6P
General tolerances: ±1.00[±0.039]

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Ultra-wide, Ultra-high Input Voltage 32W 250-3300VDC Input Voltage

Features:

- Ultra-wide input voltage range: 250-3300VDC
- Operating temperature: -40℃ to +85℃
- High I/O isolation test voltage of 6000VAC (Input-output)
- High I/O isolation test voltage of 4000VAC (Vo1-Vo2)
- High efficiency, high reliability, long lifespan
- Input under-voltage, reverse input voltage protection
- Vo1: output short-circuit, over-current, over-voltage protection
- Immunity, EFT/Surge: ±4KV perf. Criteria B
- Operating up to 5000m altitude

PV75-36D

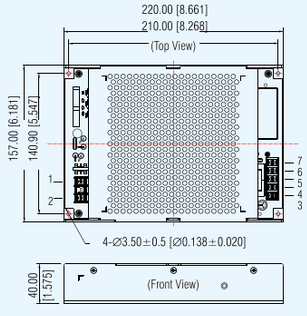
RoHS

Product Program

Model Number	Output power		Nominal output voltage and current			Efficiency (%) Typ.	Capacitive load (μF) Max.		Isolation (VDC)
	Steady state	Transient	Vo1/Io1	Vo2/Io2**					
			(Constant voltage mode)	Transient* (Constant current mode)	Steady state (Constant voltage mode)	1500VDC	Vo1	Vo2	
PV75-36D15400-01	32W	75W	15V/2000mA	20-400V/112.5mA	400V/5mA	70	2000	560	6000

Package Dimension

① PV75-36D Series: LxWxH: 220.00 x 157.00 x 40.00(mm)



Pin-Out

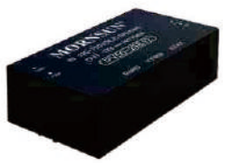
Pin	Function
1	+Vin
2	-Vin
3	Vo2-
4	Vo2+
5	NC
6	Vo1-
7	Vo1+

Unit:mm[inch]
Connector torque:22-12AWG
Tightening torque: Max 0.5 N·m
General tolerances: ±1.00[±0.039]

Ultra-wide, Ultra-high Input Voltage 50W 80-750VDC Input Voltage, Isolated & Regulated Output Series

Features:

- Ultra-wide input voltage range: 120-750VDC (PV50-25B12)/80-750VDC (PV50-25B24)
- Industrial operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC
- High efficiency, low ripple & noise
- High reliability, long lifespan
- Input under-voltage, reverse input voltage, output short-circuit, over-current, over-voltage protection
- UL1741, EN62109 approved
- Operating up to 5000m altitude



PV50-25B

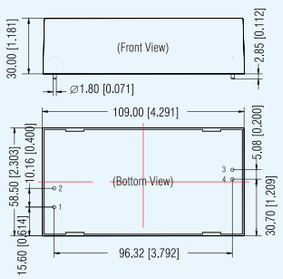
RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
PV50-25B12	50W	120/80-750	12V/4170mA	4000	83
PV50-25B24	50W		24V/2083mA		85

Package Dimension

① PV50-25B Series: LxWxH: 109.00x58.50x30.00(mm)



Pin-Out

Pin	Function
1	-Vin
2	+Vin
4	-Vo
5	+Vo

Unit:mm[inch]
Pin 1,2,3,4´s diameter:1.80[0.071]
Pin diameter tolerance:±0.10[±0.004]
Pin tolerances(H):±0.250[±0.010]
General tolerances: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Charging 0.7-1A Specialized for Super-capacitor and Lithium Battery-powed DC/DC Converter (Bidirectional Charging)

Features:

- Suitable for super-capacitor and lithium battery-powered applications
- Constant voltage & current output
- Adjustable output voltage
- output short-circuit protection
- Internal SMD construction
- Remote ON/OFF

URF2428LP-700

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF2428LP-700		9-36 (24VDC)	0-28.5V/700mA	1500	88

URB24A5YMD-1000-CL

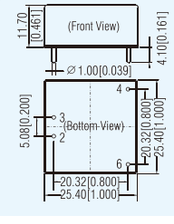
RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB24A5YMD-1000-CL		9-36 (24VDC)	0－5.06V/1000mA	1500	78

Package Dimension

① URF2428LP-700 Series: LxWxH: 25.40 × 25.40 × 11.70(mm)

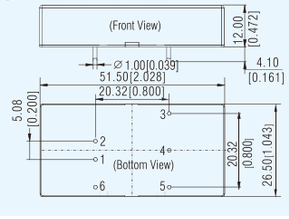


Pin-Out

Pin	Function
2	GND
3	Vin
4	+Vo
6	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

② URB24A5YMD-1000 Series: LxWxH: 51.50 × 26.50 × 12.00(mm)



Pin-Out

Pin	Function
1	GND
2	Vin
3	+Vo
4	Trim
5	0V
6	Ctrl

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Automotive 1W Fixed Input Voltage, Specialized for Automotive Industry, Isolated & Unregulated Output Series

Features:

- Meet AEC-Q100 standards
- Production process meets IATF16949 system
- Operating temperature: -40℃ to +105℃
- Continuous short-circuit protection
- Isolation voltage 4200VDC/3500VDC
- Compact SMD package, International standard pin-out
- EN62368 approved

CF0505XT-1WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
CF0505XT-1WR3	1W	5 (4.5-5.5)	5V/200mA	3500	78/82

CFB0505XT-1WR3

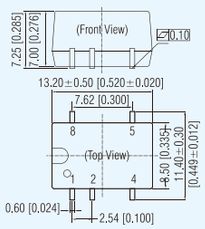
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
CFB0505XT-1WR3	1W	5 (4.5-5.5)	5V/200mA	4200	78/82

Package Dimension

① CF0505XT-1WR3 Series: LxWxH: 13.20 x 11.40 x 7.25(mm)



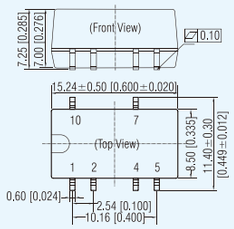
Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	+Vo
8	NC

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

② CFB0505XT-1WR3 Series: LxWxH: 15.24 x 11.40 x 7.25(mm)



Pin-Out

Pin	Function
1	GND
2	Vin
4	0V
5	NC
7	+Vo
10	NC

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

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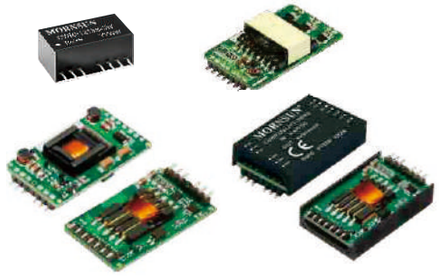
Automotive 3-6W

Wide Input Voltage, Specialized for Automotive Industry, Isolated & Regulated Output Series

Features:

- Widely used for automotive, medical, industrial control, electric power, instrument, communication applications
- No-load power consumption as low as 0.12W
- Operating temperature: -40℃ to +105℃
- Efficiency up to 82%
- Isolation voltage 3000VDC/4300VDC/3000VAC
- Meet AEC-Q100 standards
- EMI meets class 4 of CISPR25/EN55025
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- SMD/SIP package
- EN62368 approved



CWRF_S-3W

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VDC)	Eff(%) (typ)
CWRF1215S-3W	3W	7-18 (12VDC)	15V/200mA		4300	80/82

CVRC_JD-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VDC)	Eff(%) (typ)
CVRC1215JD-6WR3	6W	9-18 (12VDC)	15V/200mA 15V/100mA 15V/100mA		3000	80/82

CUWF_J(Y)T-3WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VAC)	Eff(%) (typ)
CUWF2405J(Y)T-3WR3	3W	6-42 (24VDC)	5V	480/600mA	3000	74/76
CUWF2412J(Y)T-3WR3	3W		12V	200/250mA		76/78
CUWF2415J(Y)T-3WR3	3W		15V	160/200mA		76/78
CUWF2424J(Y)T-3WR3	3W		24V	100/125mA		78/80

CUWF_J(Y)T-6WR3

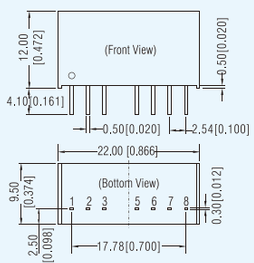
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VAC)	Eff(%) (typ)
CUWF2405J(Y)T-6WR3	6W	6-42 (24VDC)	5V	960/1200mA	3000	76/78
CUWF2412J(Y)T-6WR3	6W		12V	400/500mA		78/80
CUWF2415J(Y)T-6WR3	6W		15V	320/400mA		78/80
CUWF2424J(Y)T-6WR3	6W		24V	200/250mA		80/82

Package Dimension

1 CWRF_S-3W Series: LxWxH: 22.00 × 9.5 × 12.00(mm)



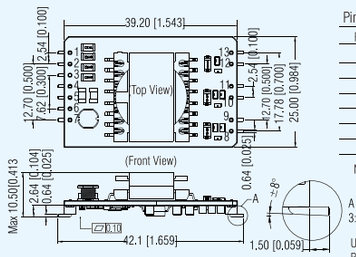
Pin-Out

Pin	Function
1	GND
2	Vin
3	NC
5	NC
6	+Vo
7	0V
8	CS

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

2 CVRC_JD-6WR3 Series: LxWxH: 42.10 x 25.00 x 10.50(mm)



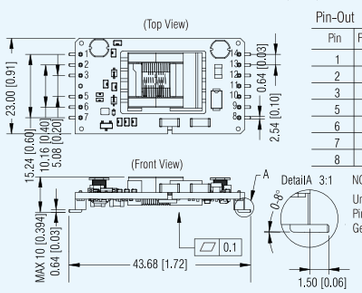
Pin-Out

Pin	Function	Pin	Function
1	NC	8	+Vo3
2	GND	9	0V3
3	GND	10	+Vo2
4	GND	11	0V2
5	Vin	12	+Vo1
6	Vin	13	0V1
7	Vin		

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

3 CUWF24_JT-3WR3/CUWF24_JT-6WR3
Series: LxWxH: 43.68 x 23.0 x 10.00(mm)



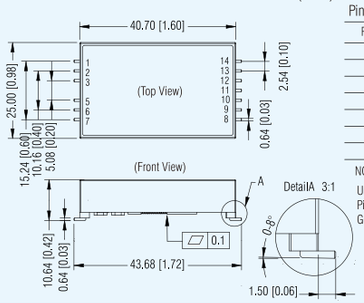
Pin-Out

Pin	Function	Pin	Function
1	Vin	9	NC
2	Vin	10	−Vo
3	Vin	11	−Vo
5	GND	12	NC
6	GND	13	+Vo
7	GND	14	+Vo
8	NC		

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

4 CUWF24_JYT-3WR3/CUWF24_JYT-6WR3
Series: LxWxH: 43.68 x 25.00 x 10.64(mm)



Pin-Out

Pin	Function	Pin	Function
1	Vin	9	NC
2	Vin	10	−Vo
3	Vin	11	−Vo
5	GND	12	NC
6	GND	13	+Vo
7	GND	14	+Vo
8	NC		

NC: No connection

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Automotive 6-8W

Wide Input Voltage, Specialized for Automotive Industry, Isolated & Regulated Output Series

Features:

- Widely used for automotive, industrial control, electric power, instrument, communication applications
- Meet AEC-Q100 standards, EN62368 approved
- Production process meets IATF16949 system
- EMI meets class 3 of CISPR25/EN55025
- 8:1 wide input voltage (4.5-36VDC)
- Operating temperature: -40℃ to +105℃
- Efficiency up to 85%
- No-load power consumption as low as 0.06W
- Isolation voltage 1500VDC/2600VAC
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- International standard pin-out

CUWB_YMD-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)		Isolation (VDC)	Eff(%) (typ)
CUWB1203YMD-6WR3	6W	4.5-36 (12VDC)	3.3V	900/1500mA	1500	77/79
CUWB1205YMD-6WR3	6W		5V	720/1200mA		81/83
CUWB1212YMD-6WR3	6W		12V	300/500mA		83/85
CUWB1215YMD-6WR3	6W		15V	240/400mA		83/85
CUWB1224YMD-6WR3	6W		24V	150/250mA		83/85

CUWF1215YMD-8WR3

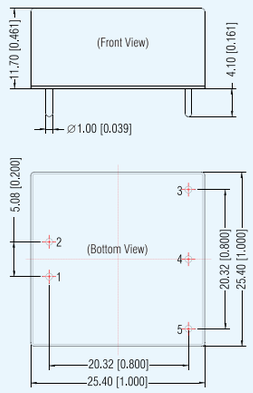
CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
CUWF1215YMD-8WR3	8W	4.5-36 (12VDC)	15V/533mA	2600	76/78

Package Dimension

1 CUWB_YMD-6WR3 Series: LxWxH: 25.40 x 25.40 x 11.70(mm)

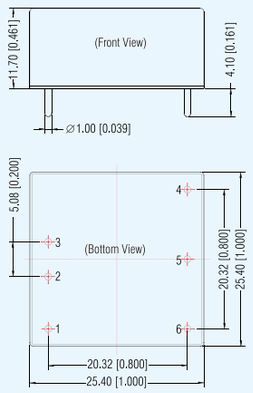


Pin-Out

Pin	Function
1	GND
2	Vin
3	+Vo
4	No Pin
5	0V

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 CUWF1215YMD-8WR3 Series: LxWxH: 25.40 × 25.40 × 11.70(mm)



Pin-Out

Pin	Function
1	No Pin
2	GND
3	Vin
4	+0V
5	No Pin
6	GND_OUT

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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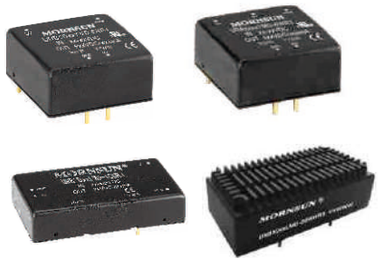
Railway 6-50W Wide Input Voltage, Specialized for Railway Industry, Isolated & Regulated Output Series

Features:

- Suitable for railway application
- Ultra-wide input voltage range: 40-160VDC
- Reinforced insulation, isolation voltage 2250/3000VDC
- Operating temperature: -40℃ to +85℃
- International standard pin-out
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- Meet railway standard EN50155



"H" Horizontal package with heat sink

URA1D_YMD-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA1D05YMD-6WR3	6W	40-160 (110VDC)	±5V/±600mA	2250 (DIP)	78/80
URA1D12YMD-6WR3	6W		±12V/±250mA		82/84
URA1D15YMD-6WR3	6W		±15V/±200mA		83/85

URB1D_YMD-6WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB1D05YMD-6WR3	6W	40-160 (110VDC)	5V/1200mA	2250 (DIP)	78/80
URB1D12YMD-6WR3	6W		12V/500mA		82/84
URB1D15YMD-6WR3	6W		15V/400mA		83/85
URB1D24YMD-6WR3	6W		24V/250mA		84/86

URA1D_(X)LMD-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URA1D05(X)LMD-10WR3	10W	40-160 (110VDC)	±5V/±1000mA	2250 (DIP)	78/80
URA1D12(X)LMD-10WR3	10W		±12V/±417mA		82/84
URA1D15(X)LMD-10WR3	10W		±15V/±334mA		82/84

URB1D_LMD-10WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB1D03LMD-10WR3	8W	40-160 (110VDC)	3.3V/2400mA	2250 (DIP)	74/76
URB1D05LMD-10WR3	10W		5V/2000mA		78/80
URB1D12LMD-10WR3	10W		12V/833mA		82/84
URB1D15LMD-10WR3	10W		15V/667mA		82/84
URB1D24LMD-10WR3	10W		24V/417mA		83/85

URB1D_LMD-15WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB1D03LMD-15WR3	13.2W	40-160 (110VDC)	3.3V/4000mA	2250 (DIP)	80/82
URB1D05LMD-15WR3	15W		5V/3000mA		82/84
URB1D12LMD-15WR3	15W		12V/1250mA		82/84
URB1D15LMD-15WR3	15W		15V/1000mA		83/85
URB1D24LMD-15WR3	15W		24V/625mA		83/85

URB1D_LMD-20WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB1D03LMD-20WR3	16.5W	40-160 (110VDC)	3.3V/5000mA	2250 (DIP)	80/82
URB1D05LMD-20WR3	20W		5V/4000mA		82/84
URB1D12LMD-20WR3	20W		12V/1667mA		83/85
URB1D15LMD-20WR3	20W		15V/1333mA		84/86
URB1D24LMD-20WR3	20W		24V/833mA		84/86

URB1D_LD-20WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URB1D03LD-20WR3	16.5W	40-160 (110VDC)	3.3V/5000mA	2250 (DIP)	80/82
URB1D05LD-20WR3	20W		5V/4000mA		83/85
URB1D12LD-20WR3	20W		12V/1667mA		84/86
URB1D15LD-20WR3	20W		15V/1333mA		84/86
URB1D24LD-20WR3	20W		24V/833mA		85/87

URE1D_LD-20WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URE1D12LD-20WR3	20W	40-160 (110VDC)	±12V/±833mA	3000 (DIP)	83/85
URE1D15LD-20WR3	20W		±15V/±667mA		84/86
URE1D24LD-20WR3	20W		±24V/±417mA		84/86

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URF1D_LD-40WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VDC)	Eff(%) (typ)
URF1D03LD-40WR3	33W	40-160 (110VDC)	3.3V/10000mA	3000 (DIP)	85/87
URF1D05LD-40WR3	40W		5V/8000mA		86/88
URF1D12LD-40WR3	40W		12V/3333mA		89/91
URF1D15LD-40WR3	40W		15V/2667mA		89/91
URF1D24LD-40WR3	40W		24V/1667mA		87/89
URF1D48LD-40WR3	40W		48V/833mA		87/89

UWTH1D_QB-50WR3

RoHS

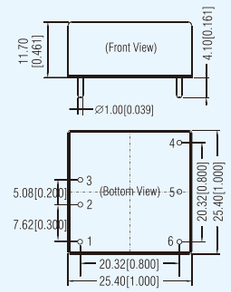
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
UWTH1D03QB-50W(H/F)R3	30W	14-160 (110VDC)	3V/10000mA	3000	85/87
UWTH1D05QB-50W(H/F)R3	50W		5V/10000mA		88/90
UWTH1D12QB-50W(H/F)R3	50W		12V/4166mA		87/89
UWTH1D15QB-50W(H/F)R3	50W		15V/3333mA		87/89
UWTH1D24QB-50W(H/F)R3	50W		24V/2083mA		88/90
UWTH1D48QB-50W(H/F)R3	50W		48V/1041mA		87/89
UWTH1D54QB-50W(H/F)R3	50W		54V/926mA		87/89

Package Dimension

① URA1D_YMD-6WR3/URB1D_YMD-6WR3

Series: LxWxH: 25.40 × 25.40 × 11.70(mm)



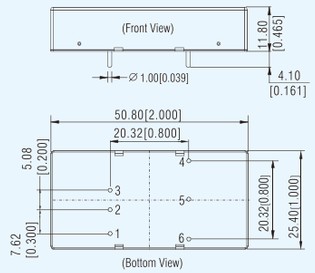
Pin-Out

Pin	Single	Dual
1	No pin	Ctrl
2	GND	GND
3	Vin	Vin
4	+Vo	+Vo
5	No pin	OV
6	OV	-Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

② URA1D_(X)LMD-10WR3/URB1D_LMD-10WR3/URB1D_LMD-15WR3/URB1D_LMD-20WR3/URB1D_LD-20WR3

Series: LxWxH: 50.80 × 25.40 × 11.80(mm)



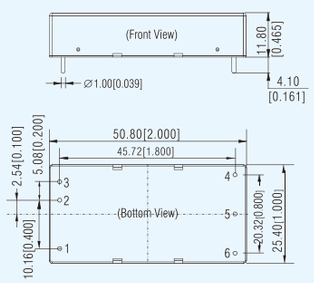
Pin-Out

Pin	Function
1	Ctrl
2	GND
3	Vin
4	+Vo
5	Trim
6	OV

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Note: URB1D-LMD-10WR3 doesn't have Pin 1 and Pin 5.

③ URF1D_LD-40WR3/URE1D_LD-20WR3

Series: LxWxH: 50.80 × 25.40 × 11.80(mm)

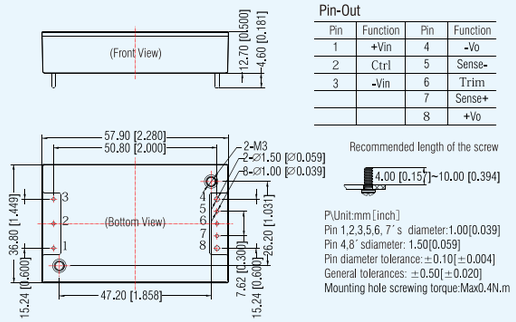


Pin-Out

Pin	Function
1	Ctrl
2	GND
3	Vin
4	+Vo
5	OV
6	Trim

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

④ UWTH1D_QB-50WR3 Series: LxWxH: 57.90 x 36.80x 12.70mm



Pin-Out

Pin	Function	Pin	Function
1	+Vin	4	-Vo
2	Ctrl	5	Sense-
3	-Vin	6	Trim
		7	Sense+
		8	+Vo

P\Unit:mm[inch]
Pin 1,2,3,5,6, 7´s diameter:1.00[0.039]
Pin 4,8´sdiameter: 1.50[0.059]
Pin diameter tolerance:±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

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Railway 5-400W Wide Input Voltage, Specialized for Railway Industry, Isolated & Regulated Output Series

Features:

- Suitable for railway application
- Ultra-wide input voltage range: 14-160VDC/43-160VDC/40-160VDC
- Operating temperature: -40℃ to +105℃
- Isolation voltage 3000VAC
- Input under-voltage, output short-circuit, over-current, over-voltage protection
- International standard pin-out
- Meet railway standard EN50155

URF1D_QB-50WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URF1D03QB-50W(H)R3	37.5W	43-160 (110VDC)	3.3V/11364mA	3000	84/86
URF1D05QB-50W(H)R3	50W		5V/10000mA		85/87
URF1D12QB-50W(H)R3	50W		12V/4167mA		86/88
URF1D15QB-50W(H)R3	50W		15V/3333mA		86/88
URF1D24QB-50W(H)R3	50W		24V/2083mA		87/89
URF1D48QB-50W(H)R3	50W		48V/1041mA		85/87

URF1D_QB-100WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URF1D03QB-100WR3	75W	43-160 (110VDC)	3.3V/22727mA	3000	84/86
URF1D05QB-100WR3	100W		5V/20000mA		86/88
URF1D12QB-100WR3	100W		12V/8333mA		87/89
URF1D15QB-100WR3	100W		15V/6667mA		87/89
URF1D24QB-100WR3	100W		24V/4167mA		89/91
URF1D48QB-100WR3	100W		48V/2083mA		86/88

UWTH1D_HB-100WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
UWTH1D12HB-100W(H)R3	100W	14-160 (110VDC)	12V/8330mA	3000	90/92
UWTH1D24HB-100W(H)R3	100W		24V/4160mA		90/92
UWTH1D28HB-100W(H)R3	100W		28V/3570mA		89/91
UWTH1D48HB-100W(H)R3	100W		48V/2080mA		89/91
UWTH1D54HB-100W(H)R3	100W		54V/1850mA		89/91

URF1D_HB-150WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URF1D05HB-150WR3	120W	43-160 (110VDC)	5V/24000mA	3000	86/88
URF1D12HB-150WR3	150W		12V/12500mA		87/89
URF1D15HB-150WR3	150W		15V/10000mA		87/89
URF1D24HB-150WR3	150W		24V/6250mA		88/89
URF1D48HB-150WR3	150W		48V/3120mA		86/88

UWTH1D_HB-200W(H)R3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
UWTH1D12HB-200W(H)R3	200W	14-160 (110VDC)	12V/16660mA	3000	90/92
UWTH1D24HB-200W(H)R3	200W		24V/8330mA		90/92
UWTH1D28HB-200W(H)R3	200W		28V/7140mA		81/91
UWTH1D48HB-200W(H)R3	200W		48V/4160mA		81/91
UWTH1D54HB-200W(H)R3	200W		54V/1850mA		81/91

URF1D_QB-75WR3

CE RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URF1D03QB-75W(H)R3	56W	43-160 (110VDC)	3.3V/17045mA	3000	84/86
URF1D05QB-75W(H)R3	75W		5V/15000mA		86/88
URF1D12QB-75W(H)R3	75W		12V/6250mA		87/89
URF1D15QB-75W(H)R3	75W		15V/5000mA		87/89
URF1D24QB-75W(H)R3	75W		24V/3125mA		89/91
URF1D48QB-75W(H)R3	75W		48V/1563mA		86/88

UWTH1D_QB-100WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
UWTH1D12QB-100WR3	100W	14-160 (110VDC)	12V/8330mA	3000	88/90
UWTH1D15QB-100WR3	100W		15V/6670mA		88/90
UWTH1D24QB-100WR3	100W		24V/4160mA		87/89
UWTH1D28QB-100WR3	100W		28V/3570mA		87/89
UWTH1D48QB-100WR3	100W		48V/2080mA		88/90
UWTH1D54QB-100WR3	100W		54V/1850mA		88/90

URF1D_HB-250WR3

RoHS

Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URF1D05HB-250WR3	200W	40-66	5V/40000mA	3000	87/88
	200W	66-160	5V/40000mA		
URF1D12HB-250WR3	250W	40-66	12V/16670mA		88/90
	250W	66-160	12V/20840mA		
URF1D15HB-250WR3	250W	40-66	15V/13330mA		88/90
	250W	66-160	15V/16670mA		
URF1D24HB-250WR3	250W	40-66	24V/8330mA		88/90
	250W	66-160	24V/10420mA		
URF1D48HB-250WR3	250W	40-66	48V/4160mA		88/90
	250W	66-160	48V/5200mA		
URF1D54HB-250WR3	250W	40-66	54V/3700mA		88/90
	250W	66-160	54V/4630mA		

URF1D_FB-400W(H)R3

RoHS

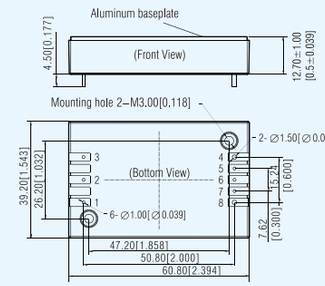
Product Program

Model Number	Power	Input Voltage (VDC)	Output Voltage/Current (Vo/Io)	Isolation (VAC)	Eff(%) (typ)
URF1D05FB-400W(H)R3	320W	66-160 (110VDC)	5V/64000mA	3000	84/86
URF1D09FB-400W(H)R3	400W		9V/44440mA		88/90
URF1D12FB-400W(H)R3	400W		12V/33330mA		89/91
URF1D15FB-400W(H)R3	400W		15V/26670mA		89/91
URF1D24FB-400W(H)R3	400W		24V/16670mA		90/92
URF1D28FB-400W(H)R3	400W		28V/14290mA		90/92
URF1D48FB-400W(H)R3	400W		48V/8333mA		90/92
URF1D54FB-400W(H)R3	400W		54V/7410mA		90/92

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 URF1D_QB Series: Without heat sink: LxWxH: 60.80 × 39.20 × 12.70(mm)

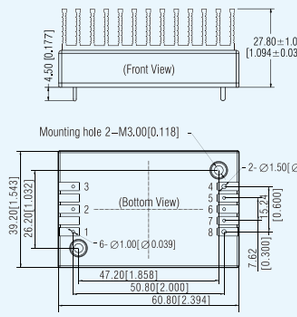


Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	-Vin
4	0V
5	Sense-
6	Trim
7	Sense+
8	+Vo

Unit:mm[inch]
Pin 1,2,3,5,6, 7´s diameter:1.00[0.039]
Pin 4,8´sdiameter: 1.50[0.059]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

With heat sink: LxWxH: 61.50 × 39.20 × 27.80(mm)

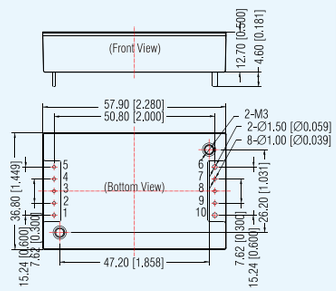


Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	-Vin
4	0V
5	Sense-
6	Trim
7	Sense+
8	+Vo

Unit:mm[inch]
Pin 1,2,3,5,6, 7´s diameter:1.00[0.039]
Pin 4,8´sdiameter: 1.50[0.059]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

2 UWTH1D-QB-100WR3 Series: LxWxH: 57.90 x 36.80x 12.70(mm)



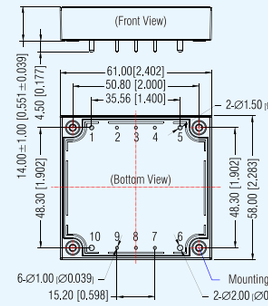
Pin-Out

Pin	Function	Pin	Function
1	+Vin	6	-Vo
2	UVLO	7	Sense-
3	Ctrl	8	Trim
4	Ext. Cap.	9	Sense+
5	-Vin	10	+Vo

Unit:mm[inch]
Pin 1,2,3,4,5,7.8. 9´s diameter:1.00[0.039]
Pin 6,10´ sdiameter: 1.50[0.059]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

Recommended length of the screw
4.00 [0.157]~5.50 [0.217]

3 UWTH1D-HB-100WR3/200WR3 Series: LxWxH: 61.00 x 58.00 x 14.00(mm)



Pin-Out

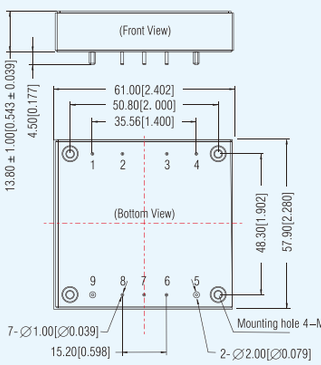
Pin	Function	Pin	Function
1	+Vin	6	-Vo
2	UVLO	7	Sense-
3	Ctrl	8	Trim
4	Ext. Cap.	9	Sense+
5	-Vin	10	+Vo

Unit:mm[inch]
Pin 2,3,4,7.8. 9´s diameter:1.00[0.039]
Pin 1,5´ sdiameter: 1.50[0.059]
Pin 6,10´ sdiameter: 2.00[0.079]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

Recommended length of the screw
4.00 [0.157]~5.50 [0.217]

4 URF1D_HB-150WR3/URF1D_HB-250WR3 Series:

Without heat sink: LxWxH: 61.00 × 57.90 × 13.80(mm)

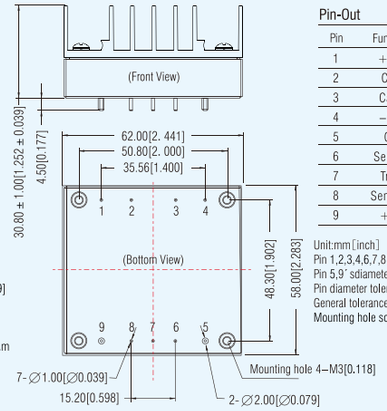


Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	Case
4	–Vin
5	0V
6	Sense-
7	Trim
8	Sense+
9	+Vo

Unit:mm[inch]
Pin 1,2,3,4,6,7,8´s diameter:1.00[0.039]
Pin 5,9´ sdiameter: 2. 00[0.079]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

With heat sink: LxWxH: 62.00 × 58.00 × 31.80(mm)

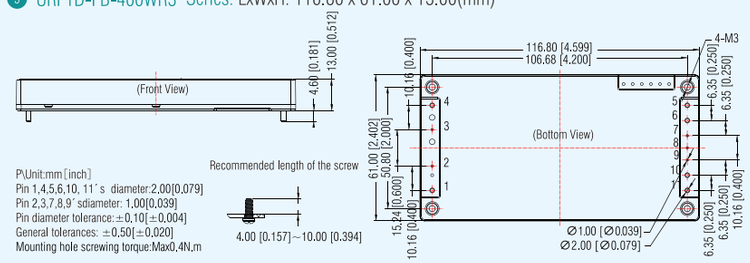


Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	Case
4	–Vin
5	OV
6	Sense-
7	Trim
8	Sense+
9	+Vo

Unit:mm[inch]
Pin 1,2,3,4,6,7,8´s diameter:1.00[0.039]
Pin 5,9´ sdiameter: 2. 00[0.079]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

5 URF1D-FB-400WR3 Series: LxWxH: 116.80 x 61.00 x 13.00(mm)



P\Unit:mm[inch]
Pin 1,4,5,6,10, 11´s diameter:2.00[0.079]
Pin 2,3,7,8,9´ sdiameter: 1.00[0.039]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]
Mounting hole screwing torque:Max0.4N.m

Recommended length of the screw
4.00 [0.157]~10.00 [0.394]

Pin-Out

Pin	Function	Pin	Function
1	+Vin	7	Sense-
2	Ctrl	8	Trim
3	Case	9	Sense+
4	-Vin	10	+Vo
5	0V	11	+Vo
6	0V		

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Non-isolated 0.3-1A Wide Input Voltage, Non-isolated & Regulated Output Series

Features:

- Operating temperature: -40℃ to +85℃
- Efficiency up to 96%
- No-load input current as low as 0.1mA
- Continuous short-circuit protection
- Negative output available: part of R3 series
- Pin-out compatible with LM78xx linear regulators (SIP package)
- EN62368 approved

Product Program

Model Number	Input voltage (VDC)* Nominal (Range)	Output Voltage (VDC)	Output Current (mA) Max.	Full load efficiency (%) Vin Min. / Vin Max.	Capacitive load (μF) Max.	Markings	Datasheet
K78U24-300R3(L)	48(36-90)	24	500	93/85	100	CE RoHS	K78U-500R3(L)
K78U03-500R3(L)	48(9-90)	3.3	500	82/69	100		
K78U05-500R3(L)	48(9-90)	5	500	87/75	100		
K78UX6-500R3(L)	48(9-90)	6.5	500	91/78	100		
K78U09-500R3(L)	48(14-90)	9	500	91/80	100		
K78U12-500R3(L)	48(18-90)	12	500	91/83	100		
K78U15-500R3(L)	48(20-90)	15	500	93/84	100		
K7803MT-500R4	24(4.5-36)	3.3	500	89/71	680	CE RoHS	K78_MT-500R4
	12(7-32)	-3.3	-300	80/71	470		
K7805MT-500R4	24(6.5-36)	5	500	91/78	680		
	12(7-31)	-5	-300	78/71	470		
K78X6MT-500R4	24(8-36)	6.5	500	91/81	680		
	12(7-28)	-6.5	-250	80/73	470		
K7809MT-500R4	24(12-36)	9	500	92/86	680		
	12(8-27)	-9	-200	82/77	470		
K7812MT-500R4	24(15-36)	12	500	92/86	680		
	12(8-24)	-12	-150	81/79	470		
K7815MT-500R4	24(18-36)	15	500	91/87	680		
	12(8-27)	-15	-150	80/84	470		
K7803MT-1000R4	24(4.75-36)	3.3	1000	89/81	680	RoHS	K78_MT-1000R4
	12(8-27)	-3.3	-500	85/81	330		
K7805MT-1000R4	24(6.5-36)	5	1000	92/84	680		
	12(8-27)	-5	-500	85/83	330		
K78X6MT-1000R4	24(8-36)	6.5	1000	92/86	680		
	12(8-24)	-6.5	-500	83/84	330		
K7809MT-1000R4	24(12-36)	9	1000	92/87	680		
	12(8-24)	-9	-500	81/84	330		
K7812MT-1000R4	24(15-36)	12	1000	94/89	680		
	12(8-20)	-12	-300	83/84	330		
K7815MT-1000R4	24(18-36)	15	1000	94/90	680		
	12(8-18)	-15	-300	82/84	330		
K7803-500R3	24(4.75-36)	3.3	500	86/80	680	cULus CE RoHS	K78-500R3
K7805-500R3	24(6.5-36)	5	500	90/84	680		
	12(7-31)	-5	-300	80/81	330		
K7809-500R3	24(12-36)	9	500	93/90	680		
K7812-500R3	24(15-36)	12	500	94/91	680		
	12(8-24)	-12	-150	84/85	330		
K7815-500R3	24(19-36)	15	500	95/93	680		
	12(8-21)	-15	-150	85/87	330		
K7803JT-500R3	24(4.75-36)	3.3	500	86/80	680	CE RoHS	K78-JT-500R3
K7805JT-500R3	24(6.5-36)	5	500	90/84	680		
K7809JT-500R3	24(12-36)	9	500	93/90	680		
K7812JT-500R3	24(15-36)	12	500	94/91	680		
K7815JT-500R3	24(19-36)	15	500	95/93	680		
K7801T-500R3	12(4.75-28)	1.5	500	76/67	680	CE RoHS	K78T-500R3
K78X2T-500R3	12(4.75-28)	1.8	500	76/69	680		
K7802T-500R3	24(4.75-32)	2.5	500	81/74	680		
K7803T-500R3	24(4.75-36)	3.3	500	86/80	680		
K7805T-500R3	24(6.5-36)	5	500	90/84	680		
K78X6T-500R3	24(8-36)	6.5	500	92/87	680		
K7809T-500R3	24(12-36)	9	500	93/90	680		
K7812T-500R3	24(15-36)	12	500	94/91	680		
K7815T-500R3	24(19-36)	15	500	95/93	680		

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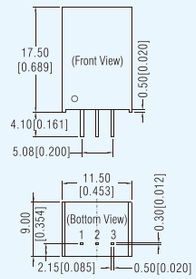
Package Dimension

1 K78Uxx-500R3 Series: LxWxH: 11.50 x 9.00 x 17.50(mm)

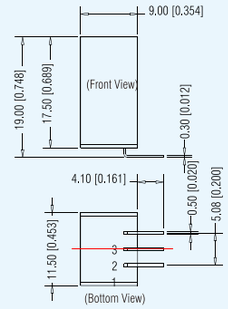


Pin-Out

Pin	Output(+)	Output(-)
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

K78Uxx-500R3L Series: LxWxH: 9.00 x11.5 x 19.00(mm)

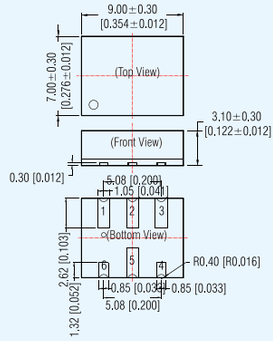


Pin-Out

Pin	Function
1	Vin
2	GND
3	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 K78_MT-500R4/1000R4 Series: LxWxH: 9.00 ×7.00 × 3.10(mm)

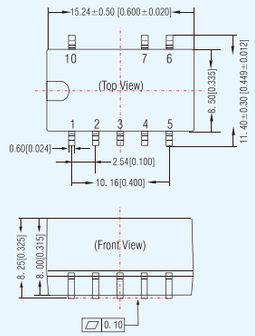


Pin-Out

Pin	Output(+)	Output(-)
1	+Vin	_Vin
2	GND	-Vo
3	_Vo	GND
4	Trim	Trim
5	GND	-Vo
6	Ctrl	Ctrl

Unit:mm[inch]
General tolerances: ±0.10[±0.004]

3 K78T-500R3 Series: LxWxH: 15.24 ×11.40 × 8.25(mm)

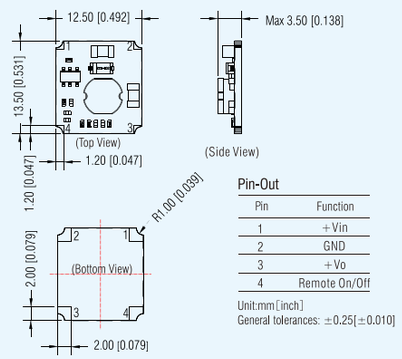


Pin-Out

Pin	Function
1	+Vin
2	+Vin
3	GND
4	+Vout
5	+Vout
6	vadj
7	GND
10	Remote on/off

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

4 K78_JT-500R3 Series: LxWxH: 12.50 x 13.50 x 3.50(mm)

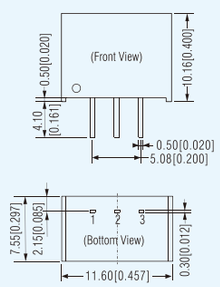


Pin-Out

Pin	Function
1	+Vin
2	GND
3	+Vo
4	Remote On/Off

Unit:mm[inch]
General tolerances: ±0.25[±0.010]

5 K78xx-500R3 Series: LxWxH: 11.60 x 7.55 x 10.16(mm)



Pin-Out

Pin	Output(+)	Output(-)
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

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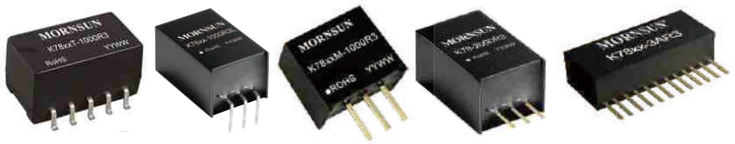
Non-isolated 0.3-3A Wide Input Voltage, Non-isolated & Regulated Output Series

Features

- Operating temperature: -40℃ to +85℃
- Efficiency up to 96%
- No-load input current as low as 0.1mA
- Continuous short-circuit protection
- Negative output available: part of R3 series
- Pin-out compatible with LM78xx linear regulators (SIP package) (1-2A applicable)



Product Program

Model Number	Input voltage (VDC)* Nominal (Range)	Output Voltage (VDC)	Output Current (mA) Max.	Full load efficiency (%) Vin Min. / Vin Max.	Capacitive load (μF) Max.	Markings	Datasheet
K7801T-1000R3	12(4.75-32)	1.5	1000	76/66	680	CE RoHS	K78T-1000R3
K78X2T-1000R3	12(4.75-32)	1.8	1000	79/69	680		
K7802T-1000R3	12(4.75-32)	2.5	1000	86/74	680		
K7803T-1000R3	24(6.5-36)	3.3	1000	90/80	680		
K7805T-1000R3	24(8-36)	5	1000	93/85	680		
K78X6T-1000R3	24(10-36)	6.5	1000	93/86	680		
K7809T-1000R3	24(13-36)	9	1000	94/89	680		
K7812T-1000R3	24(16-36)	12	800	95/92	680		
K7803-1000R3(L)	24(6-36)	3.3	1000	90/81	680	cULus CE RoHS	K78-1000R3(L)
K7805-1000R3(L)	24(8-36)	5	1000	93/86	680		
	12(8-27)	-5	-500	86/82	330		
K7809-1000R3(L)	24(13-36)	9	1000	95/90	680		
K7812-1000R3(L)	24(13-36)	12	1000	96/93	330		
	12(8-20)	-12	-300	89/88	680		
K7815-1000R3(L)	24(20-36)	15	1000	96/94	680		
	12(8-18)	-15	-300	89/89	330		
K7803M-1000R3	24(6-36)	3.3	1000	90/80	680	CE RoHS	K78_M-1000R3
K7805M-1000R3	24(8-36)	5	1000	93/85	680		
	12(8-27)	-5	-500	85/81	330		
K78X6M-1000R3	24(10-36)	6.5	1000	93/85	680		
K7809M-1000R3	24(13-36)	9	1000	94/89	680		
K7812M-1000R3	24(16-36)	12	1000	95/92	680		
	12(8-20)	-12	-300	88/87	330		
K7815M-1000R3	24(20-36)	15	1000	96/93	680		
	12(8-18)	-15	-300	87/88	330		
K7802-2000R3	24(4.5-36)	2.5	2000	89/83	2000	CE RoHS	K78-2000R3
K7803-2000R3	24(6-36)	3.3	2000	89/85	1800		
K7805-2000R3	24(8-36)	5	2000	92/89	1000		
K7809-2000R3	24(13-36)	9	2000	95/92	680		
K7812-2000R3	24(16-36)	12	2000	96/94	470		
K7815-2000R3	24(18-36)	15	2000	96/94	470		
K78L03-500R3	24(4.75-36)	3.3	500	86/80	680	cULus CE RoHS	K78Lxx-500R3
K78L05-500R3	24(6.5-36)	5	500	90/84	680		
	12(7-31)	-5	-300	80/81	330		
K78L12-500R3	24(15-36)	12	500	94/91	680		
	12(8-24)	-12	-150	84/85	330		
K78L15-500R3	24(19-36)	15	500	95/93	680		
	12(8-21)	-15	-150	85/87	330		
K78L03-1000R3	24(6-36)	3.3	1000	89/80	680	cULus CE RoHS	K78Lxx-1000R3
K78L05-1000R3	24(8-36)	5	1000	93/86	680		
	12(8-27)	-5	-500	86/82	330		
K78L12-1000R3	24(16-36)	12	1000	95/92	680		
	12(8-20)	-12	-300	88/87	330		
K78L15-1000R3	24(20-36)	15	1000	96/94	680		
	12(8-18)	-15	-300	89/89	330		
K78(L)03-3AR3	24(8-36)	3.3	3000	90/83	1000	CE RoHS	K78(L)xx-3AR3
K78(L)05-3AR3	24(8-36)	5	3000	93/89	680		
K78(L)X6-3AR3	24(10-36)	6.5	3000	94/90	330		
K78(L)09-3AR3	24(13-36)	9	3000	95/91	330		
K78(L)12-3AR3	24(16-36)	12	3000	97/93	330		
K78(L)15-3AR3	24(19-36)	15	3000	97/94	330		

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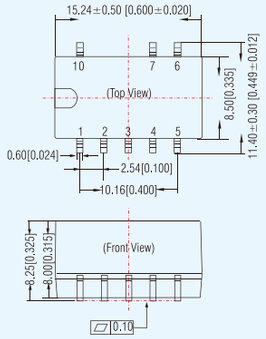
Package Dimension

① K78_T-1000R3 Series: LxWxH: 11.40x15.24 x 8.25(mm)

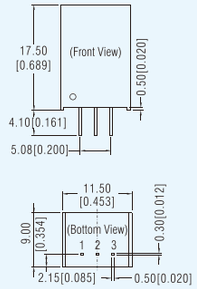


Pin-Out

Pin	Function
1	+Vin
2	+Vin
3	GND
4	+Vout
5	+Vout
6	vadj
7	GND
10	Remote on/off

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

② K78xx-1000R3(L) Series: LxWxH: 11.50 x 9.00 x 17.50(mm)

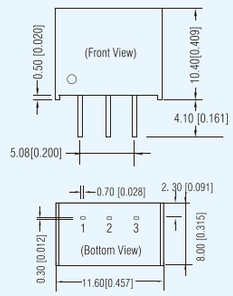


Pin-Out

Pin	Output(+)	Output(-)
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

③ K78_M-1000R3 Series: LxWxH: 11.60 × 8.00 × 10.40(mm)

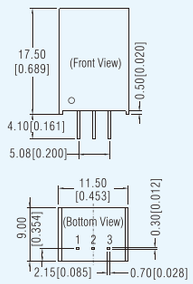


Pin-Out

Pin	Output(+)	Output(-)
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

④ K78-2000R3 Series: LxWxH: 11.50 × 9.00 × 17.50(mm)

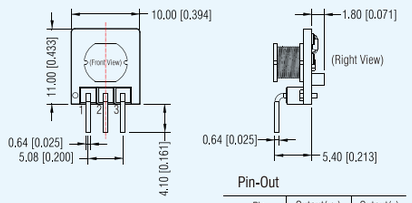


Pin-Out

Pin	Output(+)
1	Vin
2	GND
3	+Vo

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

⑤ K78Lxx-500R3 Series: LxWxH: 10.00 x 7.20 x 11.00 (mm)

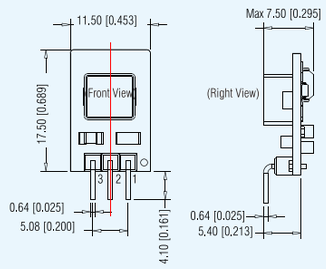


Pin-Out

Pin	Output(+)	Output(-)
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

⑥ K78Lxx-1000R3 Series: LxWxH: 11.50mm x 7.50mm x 17.50(mm)

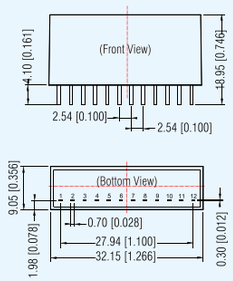


Pin-Out

Pin	Output(+)	Output(-)
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Unit:mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

⑦ K78xx-3AR3 Series: LxWxH: 32.15 x 14.85 x 9.05(mm)

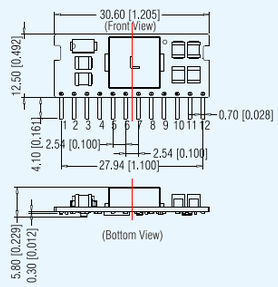


Pin-Out

Pin	Function
1	Ctrl
2,3,4	Vin
5,6,7,8	GND
9,10	+Vo
11	+Vo
12	Trim

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

K78Lxx-3AR3 Series: LxWxH: 30.6 x 12.5 x 5.8(mm)



Pin-Out

Pin	Function
1	Ctrl
2,3,4	Vin
5,6,7,8	GND
9,10	+Vo
11	+Vo
12	Trim

Unit:mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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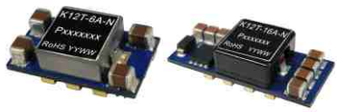
Non-isolated 6-16A Wide Input Voltage, Non-isolated & Regulated Output Series

Features

- POL power converter
- Operating temperature: -40℃ to +85℃
- Efficiency up to 96%
- Input under-voltage, output short-circuit, over-current protection
- Compact SMD package
- EN62368 approved

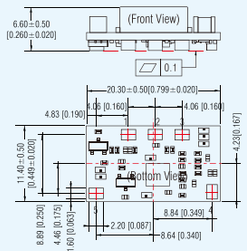


Product Program

Model Number	Input Voltage (VDC) Nominal (Range)	Input Voltage (VDC) Max.*②	Output Voltage(VDC)③ (Range)	Output Curren(A) Max./Min.	Efficiency (%) Min./Typ.	Capacitive load (μF) Max. 1mΩ≤ESR <10 mΩ	Capacitive load (μF) Max. ESR≥10 mΩ	Markings	Datasheet
K12T-6A-P	12 (8.3-14)	15	0.75~5.0	6/0	90/94	1000	3000	CE RoHS	K12T-6A-P(N)
K12T-6A-N									
K12T-10A-P	12 (8.3-14)	15	0.75~5.0	10/0	93/96	5000	6000	CE RoHS	K12T-10A
K12T-10A-N									
K12T-16A-P	12 (8.3-14)	15	0.75~5.0	16/0	92/95	5000	6000	CE RoHS	K12T-16A
K12T-16A-N									

Package Dimension

① K12T-6A-P(N) Series: LxWxH: 20.30 x 11.40 x 6.60(mm)

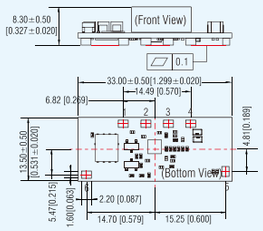


Pin-Out

Pin	Function
1	GND
2	TRIM
3	+Vo
4	CTRL
5	Vin

Unit:mm[inch]
General tolerances: ±0.25[±0.010]
Please do not use fan power other devices

② K12T-10A/16A Series: LxWxH: 33.00 x 13.50 x 8.30(mm)



Pin-Out

Pin	Function
1	GND
2	+Vo
3	TRIM
4	SENSE
5	CTRL
6	Vin

Unit:mm[inch]
General tolerances: ±0.25[±0.010]
Please do not use fan power other devices

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Non-isolated 10A Wide Input Voltage, Non-isolated & Regulated Output Series

Features:

- Efficiency up to 97%
- Input under-voltage, output short-circuit, over-current protection
- Operating temperature: -40℃ to +85℃
- Open frame package
- 1/4-Brick package international standard pin-out
- Adjustable input starting (under-voltage) voltage
- EN62368 approved

KUB4824QB-10A

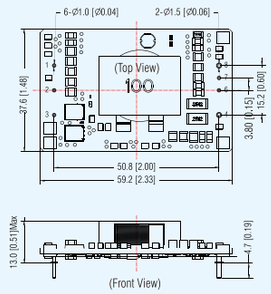
CE RoHS

Product Program

Model Number	Input Voltage (VDC) Nominal (Range)	Input Voltage (VDC) Max.*②	Output Voltage (VDC)	Output Current (VDC)	Full load efficiency(%) Min./Typ.	Capacitive load (μF)
KUB4824QB-10A	48（30-75）	80	24	10	94/97	3300
KUB4812QB-10A	48（16-75）		12	10	92/95	5500

Package Dimension

① KUB4824QB-10A/KUB4812QB-10A Series: LxWxH: 59.20 × 37.60 × 13.00(mm)



Pin-Out

Pin	Function
1	+Vin
2	Ctrl
3	-Vin
4	oV
6	Trim
7	Sense+
8	+Vo

Unit:mm[inch]
Pin 1,2,3,6, 7´s diameter:1.0[0.04]
Pin 4,8´sdiameter: 1.5[0.06]
Pin diameter tolerance:±0.10[±0.004]
General tolerances: ±0.50[±0.020]

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CAN Bus Isolated Transceiver Module

SOIC / DFN / SMD / DIP Package

Features:

- Ultra-small chip scale DFN package / compact SMD package
- Baud rate up to 5Mbps
- The bus supports maximum 110 nodes
- ESD protection: IEC/EN61000-4-2 Contact ±4KV perf. Criteria B
- Two-terminal isolation (input and output are mutually isolated), built-in isolated power supply bus protection
- Dual channels isolation (input and output are mutually isolated, two channels are mutually isolated)
- Compatible with the "ISO 11898-2" standard
- EN62368 approved

Product Program

Model number	Power supply (VDC)	Baud rate	Nodes	Communication charecteristics	Package	Whether integrated power supply or not	Isolation voltage	Product Type	Markings	Datasheet
TDA51SCANHC	4.5-5.5	1Mbps	110	CAN	SOIC	YES	5000VAC	Single channel high-rate type	RoHS	
TD041SCANH	2.375-5.5, 4.75-5.25	40k-1Mbps	110	CAN	DFN	NO	3750VAC	Single channel high-rate type	RoHS	
TD041SCANFD	2.375-5.5, 4.5-5.5	40k-5Mbps	110	CANFD	DFN	NO	3750VAC	Single channel high-rate type	RoHS	
TD541SCANH	4.75-5.25	40k-1Mbps	110	CAN	DFN	YES	3000VDC	Single channel high-rate type	RoHS	
TDH541SCANH	4.75-5.25	40k-1Mbps	110	CAN	DFN	YES	5000VDC	Single channel high-rate type		
TD541SCANFD	4.75-5.25	40k-5Mbps	110	CANFD	DFN	YES	3000VDC	Single channel high-rate type	RoHS	
TDH541SCANFD	4.75-5.25	40k-5Mbps	110	CANFD	SMD	YES	5000VDC	Single channel high-rate type		
TD331SCANH	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	2500VDC	Single channel high-rate type	CE RoHS	
TD531SCANH	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	2500VDC	Single channel high-rate type		
TD331SCANFD	3.15-3.45, 4.75-5.25	40k-5Mbps	110	CANFD	SMD	YES	2500VDC	Single channel general type	CE RoHS	
TD531SCANFD	3.15-3.45, 4.75-5.25	40k-5Mbps	110	CANFD	SMD	YES	2500VDC	Single channel general type		
CTD331SCANH	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	2500VDC	Automotive grade single channel high-rate type	CE RoHS	
CTD531SCANH	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	2500VDC	Automotive grade single channel high-rate type		
TD321SCAN	3.15-3.45, 4.75-5.25	5k-1Mbps	110	CAN	SMD	YES	3000VDC	Single channel general type	CE RoHS	
TD521SCAN	3.15-3.45, 4.75-5.25	5k-1Mbps	110	CAN	SMD	YES	3000VDC	Single channel general type		
TD321SCANH	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	3000VDC	Single channel high-rate type	CE RoHS	
TD521SCANH	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	3000VDC	Single channel high-rate type		
TD322DCAN	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	2500VDC	Dual channels general type	CE RoHS	
TD522DCAN	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	2500VDC	Dual channels general type		
TD301DCANHE	3.15-3.45, 4.75-5.25	20k-1Mbps	110	CAN	DIP	YES	2500VDC	Single channel high surge protective type	CE RoHS	
TD501DCANHE	3.15-3.45, 4.75-5.25	20k-1Mbps	110	CAN	DIP	YES	2500VDC	Single channel high surge protective type		
TD301DCANH-W	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	3000VDC	Single channel wake-up high-rate type	RoHS	
TD501DCANH-W	3.15-3.45, 4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	3000VDC	Single channel wake-up high-rate type		

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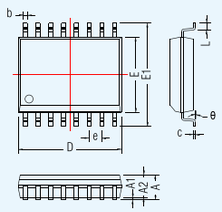
Package Dimension

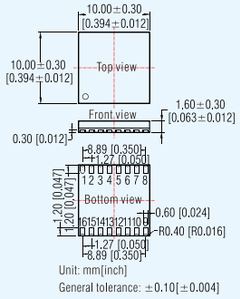
1 TDA51SCANHC Series: LxWxH: 10.40 × 10.50 × 2.65(mm)



Mark	SOIC-16 Dimension(mm) Min	Dimension(mm) Max	Dimension(inch) Min	Dimension(inch) Max
A	2.35	2.65	0.093	0.104
A1	0.10	0.30	0.004	0.012
A2	2.25	2.35	0.089	0.093
D	10.2	10.4	0.402	0.409
E	7.4	7.6	0.291	0.299
E1	10.1	10.5	0.340	0.413
L	0.55	0.85	0.022	0.033
b	0.35	0.43	0.014	0.017
e	1.27TYP		0.05TYP	
c	0.15	0.30	0.006	0.012
θ	0°	8°	0°	8°

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

2 TD041SCANH/TD041SCANFD Series: LxWxH: 10.00 × 10.00 × 1.6(mm)



Pin-Out: TD(H)041SCANH

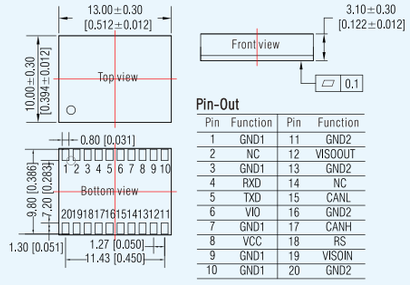
Pin	Function	Pin	Function
1	NC	9	GND2
2	GND1	10	VREF
3	GND1	11	CANL
4	VDD2SENSE	12	CANH
5	RXD	13	VDD2
6	TXD	14	NC
7	VDD1	15	NC
8	GND1	16	GND2

Pin-Out: TD(H)041SCANFD

Pin	Function	Pin	Function
1	NC	9	GND2
2	GND1	10	NC
3	GND1	11	CANL
4	VDD2SENSE	12	CANH
5	RXD	13	VDD2
6	TXD	14	NC
7	VDD1	15	NC
8	GND1	16	GND2

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

3 TD(H)541SCANH/TD(H)541SCANFD Series: LxWxH: 13.00 × 10.00 × 3.10(mm)

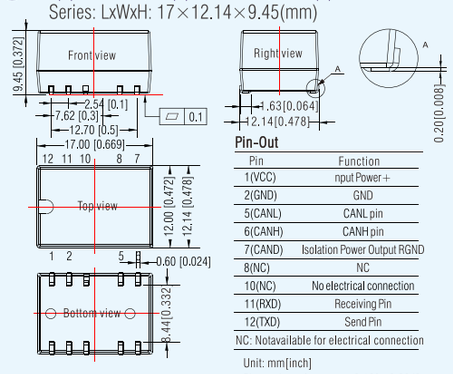


Pin-Out

Pin	Function	Pin	Function
1	GND1	11	GND2
2	NC	12	VISOOUT
3	GND1	13	GND2
4	RXD	14	NC
5	TXD	15	CANL
6	VIO	16	GND2
7	GND1	17	CANH
8	VCC	18	RS
9	GND1	19	VISOIN
10	GND1	20	GND2

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

4 TD5(3)31SCANH/TD(5)31SCANFD/CTD5(3)31SCANH Series: LxWxH: 17×12.14×9.45(mm)



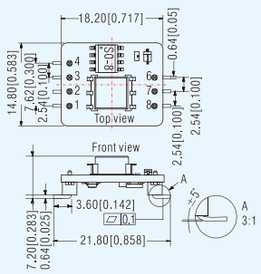
Pin-Out

Pin	Function
1(VCC)	nput Power+
2(GND)	GND
5(CANL)	CANL pin
6(CANH)	CANH pin
7(CAND)	Isolation Power Output RGND
8(NC)	NC
10(NC)	No electrical connection
11(RXD)	Receiving Pin
12(TXD)	Send Pin

NC: Notavailable for electrical connection

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

5 TD5(3)21SCAN(H) Series: LxWxH: 18.2×14.8×7.2(mm)

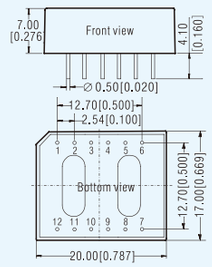


Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
3(TXD)	Send Pin
4(RXD)	Receiving Pin
6(CANH)	CANH Pin
7(CANL)	CANL Pin
8(CANG)	Isolation Power Output RGND

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±1.00[±0.039]

6 TD3(5)22DCAN Series: LxWxH: 20.00 × 17.00 × 7.00(mm)

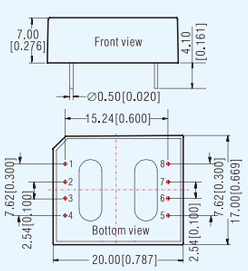


Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
3(RXD1)	TD_DCAN Receiving Pin1
4(TXD1)	TD_DCANSend Pin1
5(RXD2)	TD_DCANReceiving Pin2
6(TXD2)	TD_DCANSend Pin2
7(CANH2)	CANH Pin2
8(CANL2)	CANL Pin2
9(CANG2)	Isolation Power Output2
10(CANH1)	CANH Pin1
11(CANL1)	CANL Pin1
12(CANG1)	Isolation Power Output RGND

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

7 TD5(3)01DCANHE Series: LxWxH: 20.00×17.00×7.00(mm)

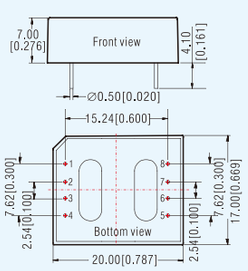


Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
3(TXD)	TD_DCAN Send Pin
4(RXD)	TD_DCAN Receiving Pin
5(PE)	GND
6(CANH)	TD_DCAN H Pin
7(CANL)	TD_DCAN L Pin
8(CANG)	Isolation Power Output CANG

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

8 TD3(5)01DCANH-W Series: LxWxH: 20.00×17.00×7.00(mm)



Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
3(TXD)	TD_CAN Send Pin
4(RXD)	TD_CAN Receiving Pin
5(STB)	Standby contorl Pin
6(CANH)	TD_CAN H Pin
7(CANL)	TD_CAN L Pin
8(CANG)	Isolation Power Output

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

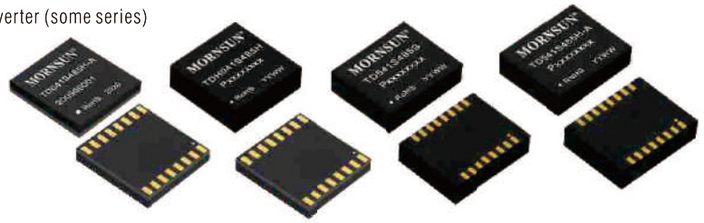
• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

RS-485 Bus Isolated Transceiver Module

SOIC / DFN Package

Features:

- Ultra-small, ultra-thin, chip scale DFN package
- Integrated high efficient isolated DC-DC converter (some series)
- Isolation voltage: 3000VDC/5000VDC
- Bus-Pin ESD protection up to 15kV(HBM)
- Baud rate up to 20Mbps
- Low communication delay
- Multiple protections
- Operating temperature: -40℃ to +105℃
- Meet AEC-Q100 Standards
- EN62368 approved



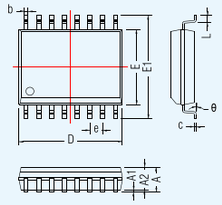
Product Program

Model number	Power supply (VDC)	Baud rate	Nodes	Communication charecteristics	Package	Whether integrated power supply or not	Isolation voltage	Product Type	Markings	Datasheet
TD041S485H	2.375-5.5, 4.5-5.5	1Mbps	256	485	DFN	NO	3750VAC	High-rate half-duplex	RoHS	
TD541S485H	4.75-5.25	1Mbps	256	485	DFN	YES	3000VDC	High-rate half-duplex	RoHS	
TDH541S485H	4.75-5.25	1Mbps	256	485	DFN	YES	5000VDC	High-rate half-duplex	RoHS	
TD041S485S-F	2.375-5.5, 4.5-5.5	20Mbps	256	485	DFN	NO	3750VAC	Full-duplex	RoHS	
TD541S485S-F	4.75-5.25	20Mbps	256	485	DFN	NO	3000VDC	Full-duplex	RoHS	
TDH541S485S-F	4.75-5.25	20Mbps	256	485	DFN	YES	5000VDC	Full-duplex	RoHS	
TD041S485H-A	2.375-5.5, 4.5-5.5	500kbps	256	485	DFN	NO	3750VAC	Automatic send/receive	RoHS	
TD541S485H-A	4.75-5.25	500kbps	256	485	DFN	YES	3000VDC	Automatic send/receive	RoHS	
TDH541S485H-A	4.75-5.25	500kbps	256	485	DFN	YES	5000VDC	Automatic send/receive	RoHS	
TD041S485S	2.375-5.5, 4.5-5.5	20Mbps	256	485	DFN	NO	3750VAC	Utral-high rate half-duplex	RoHS	
TD541S485S	4.75-5.25	20Mbps	256	485	DFN	NO	3000VDC	Utral-high rate half-duplex	RoHS	
TDH541S485S	4.75-5.25	20Mbps	256	485	DFN	YES	5000VDC	Utral-high rate half-duplex	RoHS	

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Package Dimension

1 TDA51S485HC Series: LxWxH: 10.40 × 10.50 × 2.65(mm)

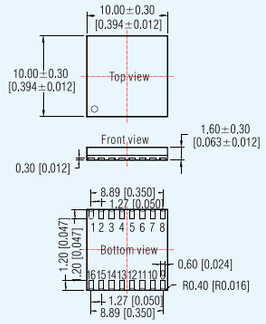


Mark	SOIC-16 Dimension(mm) Min	Dimension(mm) Max	Dimension(inch) Min	Dimension(inch) Max
A	2.35	2.65	0.093	0.104
A1	0.10	0.30	0.004	0.012
A2	2.25	2.35	0.089	0.093
D	10.2	10.4	0.402	0.409
E	7.4	7.6	0.291	0.299
E1	10.1	10.5	0.340	0.413
L	0.55	0.85	0.022	0.033
b	0.35	0.43	0.014	0.017
e	1.27TYP		0.05TYP	
c	0.15	0.30	0.006	0.012
θ	0°	8°	0°	8°

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

2 TD041S485H, TD041S485H-A

Series: LxWxH: 10.00 × 10.00 × 1.60(mm)



Pin-Out: TD(H)041S485H

Pin	Function	Pin	Function
1	VDD1	9	GND2
2	GND1	10	GND2
3	RXD	11	NC
4	RE	12	A
5	DE	13	B
6	TXD	14	NC
7	GND1	15	GND2
8	GND1	16	VDD2

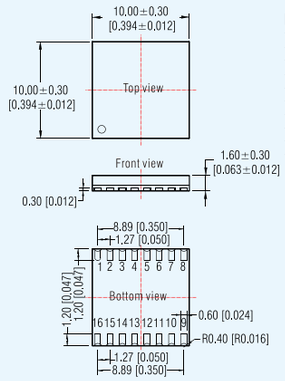
Pin-Out: TD041S485H-A

Pin	Function	Pin	Function
1	VDD1	9	GNDB
2	TXD	10	NC
3	RXD	11	NC
4	NC	12	NC
5	NC	13	NC
6	NC	14	A
7	NC	15	B
8	GNDA	16	VDD2

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

3 TD041S485S, TD041S485S-F

Series: LxWxH: 10.00 × 10.00 × 1.60(mm)



Pin-Out: TD(H)041S485H

Pin	Function	Pin	Function
1	VDD1	9	GND2
2	GND1	10	GND2
3	RXD	11	NC
4	RE	12	A
5	DE	13	B
6	TXD	14	NC
7	GND1	15	GND2
8	GND1	16	VDD2

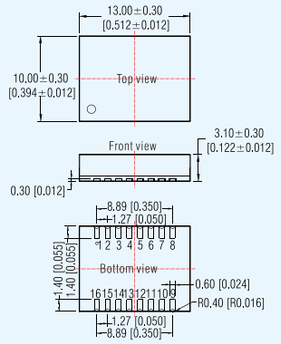
Pin-Out: TD041S485S-F

Pin	Function	Pin	Function
1	VDD1	9	GND2
2	GND1	10	NC
3	RXD	11	Y
4	RE	12	Z
5	DE	13	B
6	TXD	14	A
7	NC	15	GND2
8	GND1	16	VDD2

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

4 TD(H)541S485H, TD(H)541S485H-A

Series: LxWxH: 13.00 × 10.00 × 3.10(mm)



Pin-Out: TD541S485H

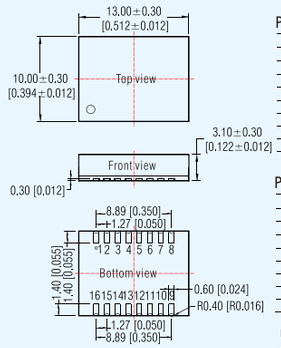
Pin	Function	Pin	Function
1	GND1	9	GND2
2	VCC	10	VISOOUT
3	RXD	11	NC
4	RE	12	NC
5	DE	13	B
6	TXD	14	A
7	VCC	15	VISOIN
8	GND1	16	GND2

Pin-Out: TD541S485H-A

Pin	Function	Pin	Function
1	GND1	9	GND2
2	VCC	10	VISOOUT
3	RXD	11	NC
4	VIO	12	NC
5	NC	13	B
6	TXD	14	A
7	VCC	15	VISOIN
8	GND1	16	GND2

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

5 TD(H)541S485S, TD(H)541S485S-F Series: LxWxH: 13.00 × 10.00 × 3.10(mm)



Pin-Out: TD541S485H

Pin	Function	Pin	Function
1	GND1	9	GND2
2	VCC	10	VISOOUT
3	RXD	11	NC
4	RE	12	NC
5	DE	13	B
6	TXD	14	A
7	VCC	15	VISOIN
8	GND1	16	GND2

Pin-Out: TD(H)541S485S-F

Pin	Function	Pin	Function
1	GND1	9	GND2
2	VCC	10	VISOOUT
3	RXD	11	Y
4	RE	12	Z
5	DE	13	B
6	TXD	14	A
7	VIO	15	VISOIN
8	GND1	16	GND2

Unit: mm[inch]
General tolerance: ±0.10[±0.004]

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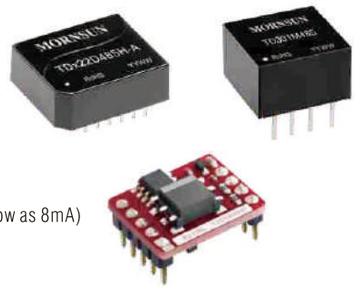
RS-485 Bus Isolated Transceiver Module

SMD / DIP Package

Features:

- Operating temperature: -40℃ to +85℃
- Isolation voltage: 2500VDC/3000VDC/3750VAC
- Two-terminal isolation (input and output are mutually isolated), built-in isolated power supply bus protection
- Dual channels isolation (input and output are mutually isolated, two channels are mutually isolated)
- Serial Interface: TD3xxD485xx compatible with the UART port of +3.3V
  TD5xxD485xx compatible with the UART port of +5V
- Low power consumption (low power consumption RS485 series, quiescent current as low as 8mA)
- Isolated power output
- ESD protection: IEC/EN61000-4-2 Contact ±4KV perf. Criteria B
- Ultra-small size, DIP/SMD package



Product Program

Model number	Power supply (VDC)	Baud rate	Nodes	Communication charecteristics	Package	Whether integrated power supply or not	Isolation voltage	Product Type	Markings	Datasheet
TD331S485	3.15-3.45, 4.75-5.25	19.2kbps	64	485	SMD	YES	2500	General half-duplex	CE RoHS	
TD531S485	3.15-3.45, 4.75-5.25	19.2kbps	64	485	SMD	YES	2500	General half-duplex		
TD331S485-L	3.15-3.45, 4.75-5.25	19.2kbps	16	485	SMD	YES	2500	Low power consumption half-duplex	CE RoHS	
TD531S485-L	3.15-3.45, 4.75-5.25	19.2kbps	16	485	SMD	YES	2500	Low power consumption half-duplex		
TD331S485H	3.15-3.45, 4.75-5.25	150kbps	128	485	SMD	YES	2500	High-rate half-duplex	CE RoHS	
TD531S485H	3.15-3.45, 4.75-5.25	150kbps	128	485	SMD	YES	2500	High-rate half-duplex		
TD331S485H-A	3.15-3.45, 4.75-5.25	150kbps	128	485	SMD	YES	2500	Automatic send/receive	CE RoHS	
TD531S485H-A	3.15-3.45, 4.75-5.25	150kbps	128	485	SMD	YES	2500	Automatic send/receive		
TD331S485H-E	3.15-3.45, 4.75-5.25	500kbps	256	485	SMD	YES	2500	High-rate enhanced half-duplex	CE RoHS	
TD531S485H-E	3.15-3.45, 4.75-5.25	500kbps	256	485	SMD	YES	2500	High-rate enhanced half-duplex		
TD321S485	3.15-3.45, 4.75-5.25	19.2kbps	64	485	SMD	YES	2500	General half-duplex	CE RoHS	
TD521S485	3.15-3.45, 4.75-5.25	19.2kbps	64	485	SMD	YES	2500	General half-duplex		
TD321S485H	3.15-3.45, 4.75-5.25	200kbps	64	485	SMD	YES	3000	High-rate half-duplex	CE RoHS	
TD521S485H	3.15-3.45, 4.75-5.25	200kbps	64	485	SMD	YES	3000	High-rate half-duplex		
TD321S485H-A	3.15-3.45, 4.75-5.25	500kbps	128	485	SMD	YES	3000	Automatic send/receive	CE RoHS	
TD521S485H-A	3.15-3.45, 4.75-5.25	500kbps	128	485	SMD	YES	3000	Automatic send/receive		
TD321S485H-E	3.15-3.45, 4.75-5.25	500kbps	256	485	SMD	YES	3000	High-rate enhanced half-duplex	CE RoHS	
TD521S485H-E	3.15-3.45, 4.75-5.25	500kbps	256	485	SMD	YES	3000	High-rate enhanced half-duplex		
TD322D485H-A	3.15-3.45, 4.75-5.25	120kbps	32	485	DIP	YES	2500	Two-way automatic send/receive	CE RoHS	
TD522D485H-A	3.15-3.45, 4.75-5.25	120kbps	32	485	DIP	YES	2500	Two-way automatic send/receive		
TD301M485	3.15-3.45, 4.75-5.25	500kbps	64	485	DIP	YES	2500	High-rate enhanced half-duplex	CE RoHS	
TD501M485	3.15-3.45, 4.75-5.25	500kbps	64	485	DIP	YES	2500	High-rate enhanced half-duplex		

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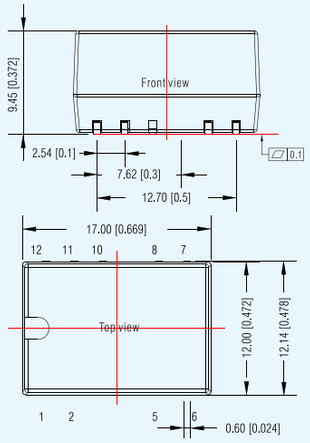
Package Dimension

① TD331/531S485, TD331/531S485-L, TD331/531S485H, TD331S/531485H-A, TD331S/531485H-E
Series: LxWxH: 17.00x12.14x9.45(mm)

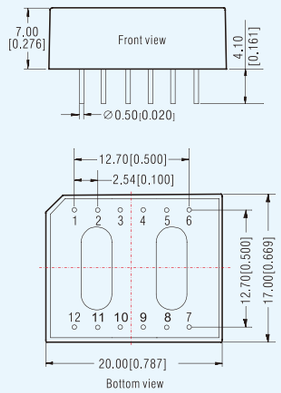


Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
5(B)	B pin
6(A)	A pin
7(RGND)	Isolation Power Output RGND
8(VO)	Isolation Power Output VO
10(CON)	Send&Receiving Control Pin
11(RXD)	Receiving Pin
12(TXD)	Send Pin

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

② TD322/522D485H-A Series: LxWxH: 20.00×17.00×7.00(mm)

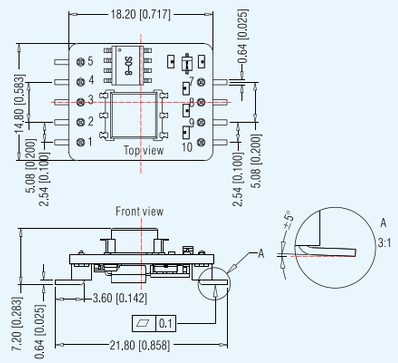


Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
3(TXD1)	Send Pin
4(RXD1)	Receiving Pin
5(TXD2)	TD_D485H-A Send pin 2
6(RXD2)	TD_D485H-A Receiving pin 2
7(A2)	TD_D485H-A A2 pin
8(B2)	TD_D485H-A B2 pin
9(SGND2)	Output GND
10(A1)	TD_D485H-A A2 pin
11(B1)	TD_D485H-A B1 pin
12(SGND1)	Output GND

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

③ TD321/521S485, TD321/521S485H-A, TD321/521S485H-E, TD521/321S485H Series: LxWxH: 18.20×14.80×7.20(mm)

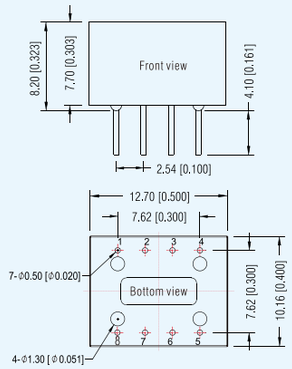


Pin-Out

Pin	Function
1(VCC)	Input Power+
2(GND)	GND
3(TXD)	Send Pin
4(RXD)	Receiving Pin
5(CON)	Send&Receiving Control Pin
7(Vo)	+5V Isolation Power Output
8(B)	TD_D485H(-E)B Pin
9(A)	TD_D485H(-E)A Pin
10(GANG)	Isolation Power Output RGND

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.10[±0.039]

④ TD301/501M485 Series: LxWxH: 12.70×10.16×7.70(mm)



Pin-Out

Pin	Function
1(RXD)	Receiving Pin
2(TXD)	Send Pin
3(GND)	GND
4(VCC)	Input Power+
5(RGND)	Isolation Power Output RGND
6(A)	A Pin
7(B)	B Pin
8(VO)	Isolation Power Output VO

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

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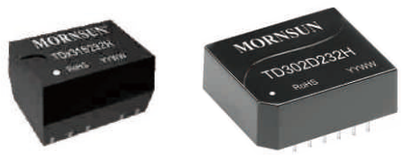
Industrial Bus Isolated Transceiver Module

RS-232 Bus Isolated Transceiver Module

DFN / SMD Package

Features:

- Ultra-small, ultra-thin, chip scale DFN/SMD package
- Integrated high efficient isolated DC-DC converter (some series)
- Isolation voltage: 3000VDC/5000VDC
- Low communication delay
- Multiple protections
- Operating temperature: -40℃ to +105℃
- EN62368 approved

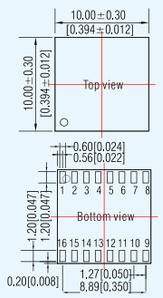


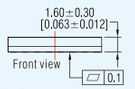
Product Program

Model number	Power supply (VDC)	Baud rate	Nodes	Communication charecteristics	Package	Whether integrated power supply or not	Isolation voltage	Product Type	Markings	Datasheet
TD041S232H	2.375-5.5, 4.5-5.5	120kbps	1	232	DFN	NO	3750VAC	Single channel high-rate type	RoHS	
TD541S232H	4.5-5.5	120kbps	1	232	DFN	YES	3000VDC	Single channel high-rate type	RoHS	
TDH541S232H	4.5-5.5	120kbps	1	232	DFN	YES	5000VDC	Single channel high-rate type		
TD331S232H	3.15-3.45, 4.75-5.25	0-115.2kbps	1	232	SMD	YES	2500VDC	Single channel high-rate type	CE RoHS	
TD531S232H	3.15-3.45, 4.75-5.25	0-115.2kbps	1	232	SMD	YES	2500VDC	Single channel high-rate type		
TD302D232H	3.0-3.6, 4.5-5.5	0-115.2kbps	2	232	SMD	YES	2500VDC	Dual channels high-rate type	RoHS	
TD502D232H	3.0-3.6, 4.5-5.5	0-115.2kbps	2	232	SMD	YES	2500VDC	Dual channels high-rate type		

Package Dimension

① TD041S232H Series: LxWxH: 10.00 × 10.00 × 1.60(mm)



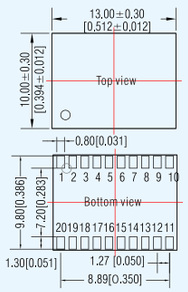


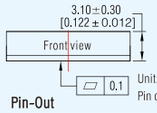
Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]

Pin-Out

Pin	Function	Pin	Function
1	GND1	9	GND2
2	VCC1	10	VCC2
3	TXD	11	NC
4	RXD	12	NC
5	NC	13	RIN
6	NC	14	TOUT
7	VCC1	15	VCC2
8	GND1	16	GND2

② TD541S232H Series: LxWxH: 13.00 × 10.00 × 3.10(mm)



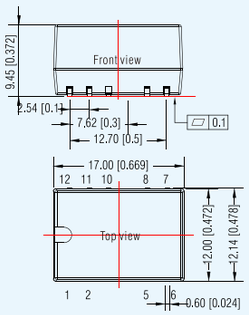


Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]

Pin-Out

Pin	Function	Pin	Function
1	NC	11	GND2
2	VCC	12	V-
3	VCC	13	C2-
4	GND1	14	C2+
5	GND1	15	RIN
6	GND1	16	TOUT
7	GND1	17	C1-
8	RXD	18	C2-
9	TXD	19	V+
10	GND1	20	VISO

③ TD331/531S232H Series: LxWxH: 17.00 × 12.14 × 9.45(mm)

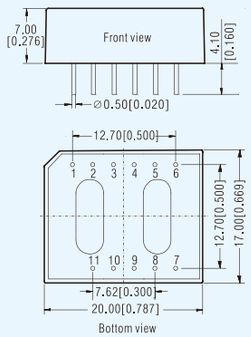


Pin-Out

Pin	Function
1(VCC)	nput Power+
2(GND)	GND
5(T_OUT)	RS-232 Output
6(R_IN)	RS-232Input
7(RGND)	Isolation Power Output RGND
8(NC)	NC
10(NC)	No electrical connection
11(RXD)	TTL/CMOS Output
12(TXD)	TTL/CMOSInput

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

④ TD302/502D232H Series: LxWxH: 20.00 × 17.00 × 7.00(mm)



Pin-Out

Pin	Function
1(VCC)	Input Power +
2(GND)	GND
3(TXD1)	TTL/CMOS Input
4(RXD1)	TTL/CMOS Output
5(TXD2)	TTL/CMOS Input
6(RXD2)	TTL/CMOS Output
7(R2IN)	Rs-232 Input
8(T2OUT)	Rs-232 Output
9(R1IN)	Rs-232 Input
10(T1OUT)	Rs-232 Output
11(RGND)	Isolation Power Output RGND

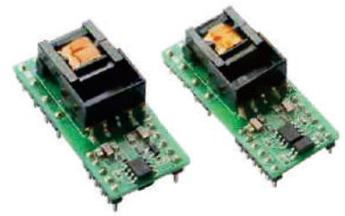
Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

AC/DC Power Supply with Integrated Isolated Transceiver Module

Features:

- Wide input voltage range: 85-305VAC/100-430VDC
- Accepts AC and/or DC input (dual-use of same terminal)
- Isolation voltage 4000VAC
- Output short circuit and over-current protection
- High baud rate up to 1Mbps
- Connect up to 128 (485) / 110 (CAN) nodes on one bus
- Open frame, compact size, high power density
- Flexible design of peripheral circuit reduces layout issues

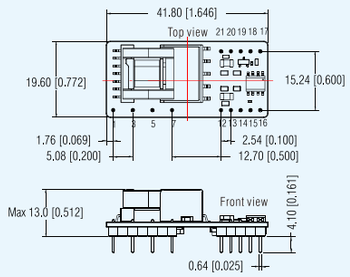


Product Program

Model number	Power	Rated output voltage (V)	Rated output current Io (mA)	Efficiency (%) Typ.	Baud rate (kbps)	Nodes	Markings	Datasheet
TLA03-03KCAN	3W	3.3V/5V	500/25	55	5-1000	110	CE RoHS	
TLA05-03KCAN	3W	5V/5V	500/25	68	5-1000	110		
TLA12-03KCAN	3W	12V/5V	200/25	70	5-1000	110		
TLA03-03K485	3W	3.3V/5V	500/25	55	500	128	CE RoHS	
TLA05-03K485	3W	5V/5V	500/25	68	500	128		
TLA12-03K485	3W	12V/5V	200/25	70	500	128		
TLA03-03K485L	3W	3.3V/5V	500/25	55	19.2	128	CE RoHS	
TLA05-03K485L	3W	5V/5V	500/25	68	19.2	128		
TLA12-03K485L	3W	12V/5V	200/25	70	19.2	128		

Package Dimension

① TLAxx-03KCAN Series: LxWxH: 41.80 × 19.60 × 13.00(mm)



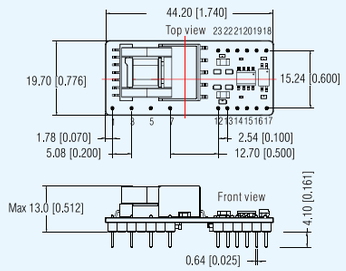
Pin-Out

Pin	Function	Pin	Function
1	AC(L)	15	CANH
3	AC(N)	16	CANL
5	+V(cap)	17	RXD
7	-V(cap)	18	TXD
12	-Vo2	19	VDD
13	+Vo2	20	+Vo1
14	NC	21	-Vo1

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±1[±0.040]
The layout of the device is for reference only, please refer to the actual product

② TLAxx-03K485/TLAxx-03K485L

Series: LxWxH: 44.20 × 19.70 × 13.00(mm)



Pin-Out

Pin	Function	Pin	Function
1	AC(L)	16	B
3	AC(N)	17	NC
5	+V(cap)	18	CON
7	-V(cap)	19	RXD
12	-Vo2	20	TXD
13	+Vo2	21	VDD
14	NC	22	+Vo1
15	A	23	-Vo1

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±1[±0.040]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

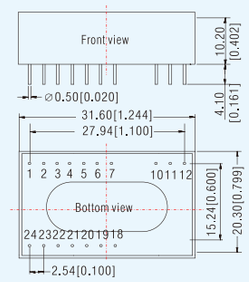
Protocol Conversion Module

Features:

- Supports two-way data communication between UART/SPI and CAN interface
- Built-in high efficiency isolated power supply, two-port isolation voltage (3kVDC)
- UART baud rate up to 921.6kbps
- SPI rate up to 1.5Mbps
- CAN baud rate up to 1Mbps
- Supporting transparent conversion, transparent tape identification conversion, custom protocol conversion
- Operating temperature: -40℃ to +85℃
- The bus supports maximum 110 nodes
- Set isolation and ESD bus protection in one

Package Dimension

① TD3/5USPCAN Series: LxWxH: 31.60 × 20.30 × 10.20(mm)



Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Pin-Out

Pin	Mark	Function
1	VCC	Input Power+
2	GND	GND
3	RST	Reset Pin
4	TXD	UART Send Pin
5	RXD	UART Receive Pin
6	MODE	Mode Control Pin
7	CTL1	SPI Master Control Pin 1
10	CGND	Isolated Power Output CGND
11	CANL	CANL Pin
12	CANH	CANH Pin
18	SSEL	SPI Chip Select Pin
19	CTL0	SPI Master Control Pin 0
20	INT	Slave Feedback Pin
21	SCK	SPI SCK Pin
22	MOSI	SPI MOSI Pin
23	MISO	SPI MISO Pin
24	CFG	Configuration Pin

Product Program

Model number	Power input (VDC)	Static current (mA)	Maximum operating current (mA)	UART baud rate(bps)	SPI rate (Mbit/s)	CAN baud rate (bps)	Nodes	Markings	Datasheet
TD3USPCAN	3.3	35	110	300 - 921600	0 - 1.5	5k-1M	110	CE RoHS	
TD5USPCAN	5	35	105	300 - 921600	0 - 1.5	5k-1M	110		

Current Transducer

Features:

- Accuracy up to 0.8%
- Linearity up to 0.1%
- Low temperature drift
- Wide frequency bandwidth
- Optimized response time
- No insertion losses
- High immunity to external interference
- Withstand a symmetrical voltage change of ±5%
- Meets UL 94V-0/IEC61010-1 standards

TLAx00-S

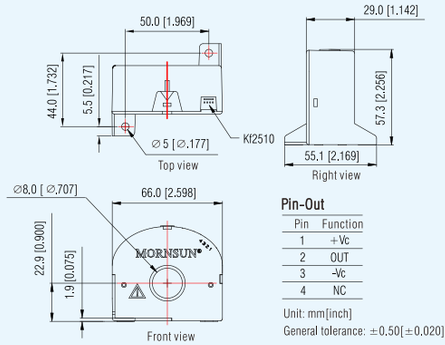
RoHS

Product Program

Model number	Input voltage (VDC)	Effective value of primary current (A)	Primary current measurement range (A)	Effective value of secondary side current (mA)	Turns ratio
TLA100-S*	±12/±15	50	-100～+100	50	1:1000
TLA200-S*	±12/±15	100	-200～+200	50	1:2000
TLA300-S*	±12/±15	200	-300～+300	100	1:2000
TLA500-S*	±12/±15	300	-500～+500	120	1:2500
TLA800-S*	±12/±15	500	-800～+800	250	1:2000
TLA1000-S*	±12/±15	300	-1000～+1000	142.5	1:3500

Package Dimension

① TLAX00-S Series: LxWxH: 31.60 × 20.30 × 10.20(mm)



Pin-Out

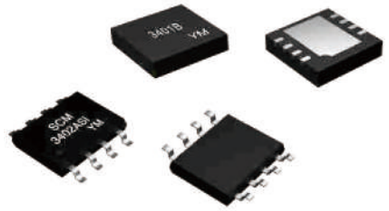
Pin	Function
1	+Vc
2	OUT
3	-Vc
4	NC

Unit: mm[inch]
General tolerance: ±0.50[±0.020]

Industrial Bus Signal Interface Chips

Features:

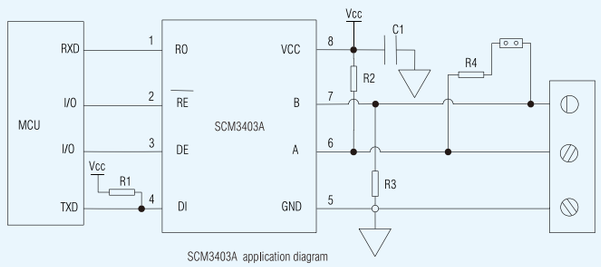
- VCC voltage range: 4.5-5.5V/3.0-3.6V
- Half-Duplex
- Data bus: RS485 / CAN
- Baud rate up to 12Mbps
- Nodes: 256 (RS485) / 110 (CAN)
- Package: SOP-8, DFN 3X3



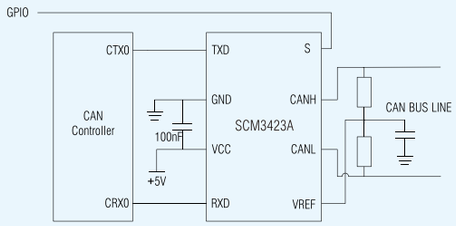
Product Program

Model number	VCC voltage range (V)	Bus type	Duplex mode	Baud rate (Mbps)	No. of channels	Interface withstand voltage (V)	Dominant timeout function	Nodes	Package	Datasheet
SCM3403A	3.0-5.5	RS-485	Half-duplex	12	1	−36 to +36	/	256	SOP-8	
SCM3421A	4.5-5.5	CAN	Half-duplex	1	1	−36 to +36	No	110	SOP-8	
SCM3422A	4.5-5.5	CAN	Half-duplex	1	1	−40 to +40	Yes	110	SOP-8	
SCM3423A	4.5-5.5	CAN	Half-duplex	1	1	−40 to +40	Yes	110	SOP-8	

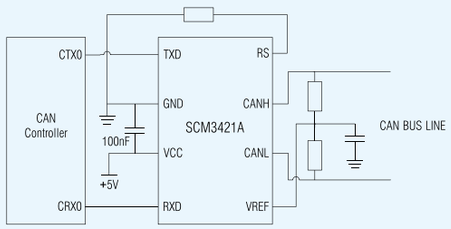
Typical Application Circuit



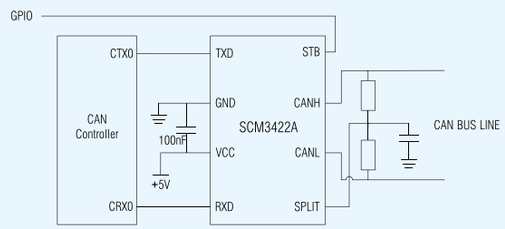
SCM3403A application diagram



SCM3423A application diagram



SCM3421A application diagram



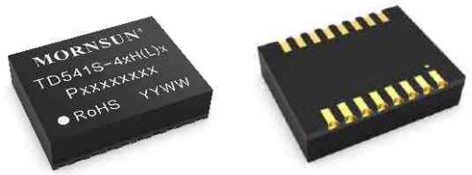
SCM3422A application diagram

Digital Isolators

SOIC / DFN Package

Features:

- Integrated high efficiency isolated power supply
- Isolation voltage 3750VAC
- Baud rate up to 150Mbps
- Extremely low communication delay
- 0-4 channels direction selectable
- Operating temperature: -40℃ to +125℃
- EN62368 approved



Product Program

Model number	Bus type	Whether integrated power supply or not	Isolation (VDC)	Input voltage (VDC)	No. of reverse channels	Output default voltage	Output high level voltage	Baud rate	Package	Markings	Datasheet
TDA51S-41HC	Quad channels high-rate digital isolator	Yes	5000	3.0-5.5	1	High	3.3/5V adjustable	150Mbps	SOIC16	CE RoHS	
TD541S-40H5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	0	High	5V	150Mbps	DFN	CE RoHS	
TD541S-41H5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	1	High	5V	150Mbps	DFN		
TD541S-42H5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	2	High	5V	150Mbps	DFN		
TD541S-43H5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	3	High	5V	150Mbps	DFN		
TD541S-44H5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	4	High	5V	150Mbps	DFN		
TD541S-40L5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	0	Low	5V	150Mbps	DFN	CE RoHS	
TD541S-41L5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	1	Low	5V	150Mbps	DFN		
TD541S-42L5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	2	Low	5V	150Mbps	DFN		
TD541S-43L5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	3	Low	5V	150Mbps	DFN		
TD541S-44L5	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	4	Low	5V	150Mbps	DFN		
TD541S-40H3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	0	High	3.3V	150Mbps	DFN	CE RoHS	
TD541S-41H3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	1	High	3.3V	150Mbps	DFN		
TD541S-42H3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	2	High	3.3V	150Mbps	DFN		
TD541S-43H3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	3	High	3.3V	150Mbps	DFN		
TD541S-44H3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	4	High	3.3V	150Mbps	DFN		
TD541S-40L3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	0	Low	3.3V	150Mbps	DFN	CE RoHS	
TD541S-41L3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	1	Low	3.3V	150Mbps	DFN		
TD541S-42L3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	2	Low	3.3V	150Mbps	DFN		
TD541S-43L3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	3	Low	3.3V	150Mbps	DFN		
TD541S-44L3	Quad channels high-rate digital isolator	Yes	3750	4.75-5.25	4	Low	3.3V	150Mbps	DFN		

Package Dimension

For the package dimension, please visit www.mornsun-power.com to check the datasheet.

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

EMC Filter

Specialized for AC/DC Converter

Features:

- Greatly improve EMS performance when used with Mornsun AC/DC power supply
- Enable EMI performance to meet requirements of CISPR22/EN55022 CLASS B standard
- Operating temperature: -40℃ to +85℃
- Input voltage range: 85-305VAC
- Compact size, cost-effective
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN-Rail Mounting

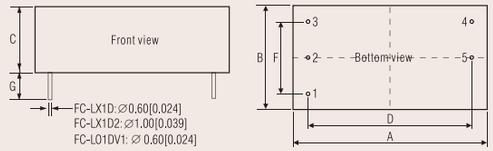
Product Program

Model number	Input voltage range(VAC)	Nominal current (A) (max)	Outstanding features	Markings & Datasheet
FC-LX1D	85-305	1.5	Surge: ±2KV/±4KV	RoHS
FC-LX1D2	85-305	1.5	Surge: ±2KV/±6KV	RoHS
FC-LX1DR2	85-305	0.2	Surge: ±2KV/±4KV	RoHS
FC-LX1DV1	85-305	0.2	Surge: ±1KV/±2KV	RoHS

Note: 1. Used with AC/DC converter.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting.

Product Program

① FC-LX1D/FC-LX1D2/FC-LX1DR2/FC-LX1DV1



Outline & Dimensions

No	FC-LX1D	FC-LX1D2	FC-L01DV1	FC-LX1DR2
A	33.70	53.80	33.70	33.70
B	22.20	28.80	22.20	22.20
C	18.00	19.00	18.00	18.00
D	28.00	45.72	28.00	27.94
F	15.24	20.32	15.24	15.24
G	6.00	6.00	6.00	6.00

Pin-Out

Pin	Function
1	⏚
2	IN(N)
3	IN(L)
4	OUT(L)
5	OUT(N)

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

EMC Filter

Specialized for DC/DC Converter

Features:

- Operating temperature: -40℃ to +85℃
- Enable EMI performance to meet requirements of CISPR22/EN55022 CLASS B standard
- Meets the requirements of surge level of ±2KV/4KV (level four)
- Meets IEC/EN61000-4 and CISPR32/EN55032 standards
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN-Rail Mounting

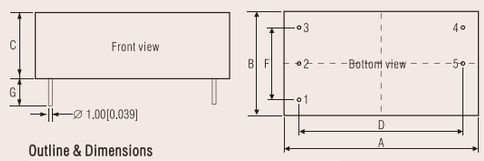
Product Program

Model number	Input voltage range(VDC)	Max. output power (W)	Outstanding features	Markings & Datasheet
FC-AX3D	10-36	30W	Reverse voltage protection and slow start-up function	RoHS
FC-B02D	18-75	30W		
FC-D03D	18-36	30W		
FC-E03D	36-75	30W		
FC-A01D	9-36	1A	Small volume	RoHS
FC-B01D	18-75	1A		

Note: 1. Used with DC/DC converter.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting.

Product Program

① FC-AX3D/FC-B03D/FC-D03D/FC-E03D/FC-A01D/FC-B01D



Outline & Dimensions

No	FC-AX3D	FC-B02D	FC-D03D	FC-E03D	FC-A01D	FC-B01D
A	53.80	53.80	53.80	53.80	37.00	37.00
B	28.80	28.80	28.80	28.80	23.00	23.00
C	19.00	19.00	19.00	19.00	15.00	15.00
D	45.72	45.72	45.72	45.72	30.48	30.48
F	20.32	20.32	20.32	20.32	17.78	17.78
G	6.00	6.00	6.00	6.00	4.10	4.10

Pin-Out

Pin	Function
1	⏚
2	−Vin
3	+Vin
4	+Vo
5	-Vo

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

EMC Filter

Specialized for Railway

Features:

- Improve EMI & EMS performance of 10-100W railway power supply
- Enable the railway power supply to meet requirements of EN50155 standard
- Operating temperature: -40℃ to +85℃
- Efficiency up to 98%
- Meet IEC/EN61000-4 and CISPR32/EN55032 standards
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN-Rail Mounting

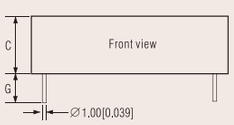
Product Program

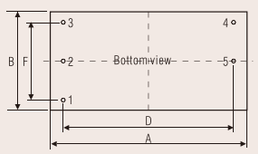
Model number	Input voltage range(VDC)	Max. output power (W)	Outstanding features	Markings & Datasheet
FC-C01D	40-160	10	Reverse voltage protection	RoHS
FC-CX1D	40-160	30		
FC-C03D	40-160	50		
FC-CX3D	66-160	100	Input over-voltage protection	RoHS

Note: Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting.

Package Dimension

① FC-C01D/FC-CX1D/FC-C03D/FC-CX3D





Outline & Dimensions

No	FC-C01D	FC-CX1D	FC-C03D	FC-CX3D
A	50.80	53.80	53.80	53.80
B	25.40	28.80	28.80	28.80
C	15.16	19.00	19.00	23.50
D	45.72	45.72	45.72	45.72
F	20.32	20.32	20.32	20.32
G	6.00	6.00	6.00	6.00

Pin-Out

Pin	Function
1	⏚
2	−Vin
3	+Vin
4	+Vo
5	-Vo

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

EMI Filter

Specialized for DC/DC Converter

Features:

- Improve EMI performance of 0-80V wide input voltage DC/DC converter with under 3A input current
- Enable MORNSUN DC/DC converter to meet requirements ofEN55022 Class B standard
- Compact size, cost-effective
- Operating temperature: -40℃ to +85℃
- Attenuation rate up to 20dB
- Restrain line disturb of DC power source
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN-Rail Mounting

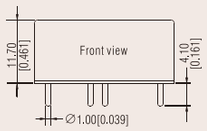
Product Program

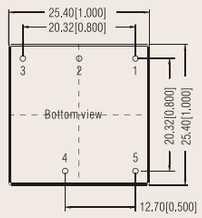
Model number	Input voltage range(VDC)	Max. output power (W)	Outstanding features	Markings & Datasheet
FI-B03D	0-80	3	Meet EMI requirements of Class B standard	RoHS

Note:
1. The use of a EMI filter enables MORNSUN DC/DC converter with under 3A input current to meet requirements of EN 55022 Class B standard.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting.

Package Dimension

① FI-B03D Series: LxWxH: 25.40x25.40x11.70(mm)





Pin-Out

Pin	Function
1	+Vin
2	-Vin
3	GND
4	-Vo
5	+Vo

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]
Unmarked Tolerance: ±0.50[±0.020]

• This catalog displays the latest products. If products in the catalog are not able to meet your needs, please contact our sales.

Pulse Group Suppressor

Specialized for DC/DC Converter

Features:

- Improve pulse group suppressor performance of 0-80V wide input DC/DC converter
- Enable MORNSUN DC/DC converter to meet ±4KV requirements of IEC/EN61000-4-4
- Compact size, cost-effective
- Operating temperature: -40℃ to +85℃
- Attenuation rate up to 30dB
- Restrain line disturb of DC power source
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN-Rail Mounting

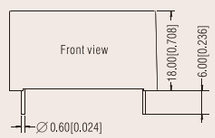
Product Program

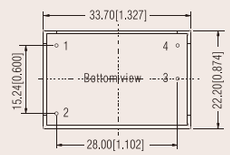
Model number	Input voltage range(VDC)	Nominal current (A) (MAX)	Outstanding features	Markings & Datasheet
FT-AX1D	0-40	1.5	Meet ±4KV requirements of pulse group suppressor	RoHS
FT-BX1D	0-80	1.5		

Note:
1. Enable MORNSUN DC/DC converter to meet ±4KV requirements of IEC/EN61000-4-4.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting.

Package Dimension

① FT-AX1D/FT-BX1D Series: LxWxH: 33.70x22.20x18.00(mm)





Pin-Out

Pin	Function
1	-Vin
2	+Vin
3	+Vo
4	-Vo

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Surge Protection Module

485-AB Bus

Features:

- Suppress signal port lightning surge
- Enable MORNSUN RS485 module to meet ±2KV/±4KV surge level of IEC/EN61000-4-5
- Compact size, cost-effective
- Impact anti - current: ≤1KA (8/20 μ s simulated lightning waveforms)

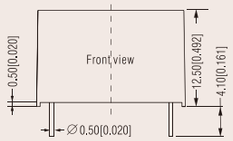
Product Program

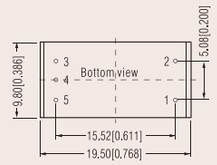
Model number	Operating voltage (VDC)	Clamping voltage (VDC)	Nominal current (A) (MAX)	Data Rate (Max)	Markings & Datasheet
FS-TD01D	0-5	15	≤0.1	115.2kbps	RoHS

Note:
1. Enable RS485 modules to meet surge level of IEC/EN61000-4-5 ±2KV (2Ω internal resistance) / ±4V (12Ω internal resistance)
2. Customization is acceptable..

Package Dimension

① FS-TD01D Series: LxWxH: 19.50x12.50x9.80(mm)





Pin-Out

Pin	Designation	Funtion
1	A(out)	Output 485 BUS A
2	B(out)	Output 485 BUS A
3	B(in)	Input 485 BUS A
4	PE	Protective Earth
5	A(in)	Input 485 BUS A

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]
Unmarked Tolerance: ±0.50[±0.020]

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Common Mode Filter

Features:

- Compact size
- Good temperature characteristic
- Multiple inductances available

FL2D-xx-xxx

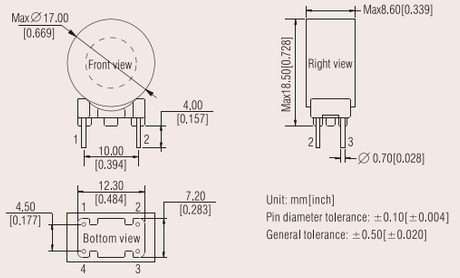
RoHS

Product Program

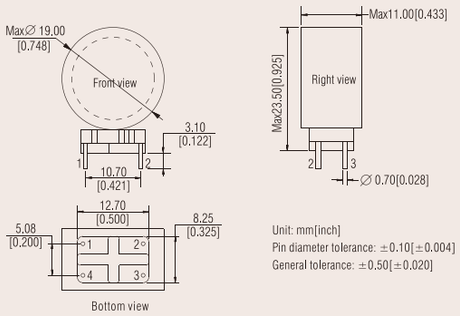
Model number	Inductance (μH)	Current (A) (max)	DCR (mΩ)	Weight (g)
FL2D-Z5-103	10000*2	0.5	500*2	4.5
FL2D-Z5-153	15000*2	0.5	600*2	4.5
FL2D-Z5-223	22000*2	0.5	650*2	4.5
FL2D-10-102	1000*2	1	70*2	4.5
FL2D-10-222	2200*2	1	90*2	4.5
FL2D-10-332	3300*2	1	100*2	4.5
FL2D-10-472	4700*2	1	140*2	4.5
FL2D-30-351	350*2	3	30*2	3.9
FL2D-30-102	1000*2	3	40*2	4.5
FL2D-30-222	2200*2	3	50*2	4.5
FL2D-30-472	4700*2	3	70*2	4.5
FL2D-10-682	6800*2	1	160*2	6.5
FL2D-10-822	8200*2	1	180*2	6.5
FL2D-30-103	10000*2	3	50*2	13.8
FL2D-A2-202	2000*2	12	145*2	25.2

Package Dimension

1 FL2D-Z5-103/153/223/FL2D-10-102/222/332/472/ FL2D-30-102/222/472 Series: LxWxH: 17.8x8.50x20(mm)



2 FL2D-10-682/FL2D-10-822 Series: LxWxH: 20.0x12.0x25.0(mm)

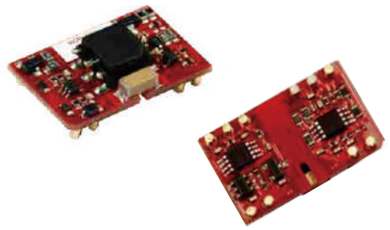


Signal Conditioning Module

Signal Self-driving Type

Features:

- Isolation voltage 2500VDC/60s
- Two-end power supply, two-port isolation (signal input and signal output)
- Frequency response ≥ 2kHz
- Full and zeros adjustment functions
- High linearity of 0.1% Full Scale
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)
- Compact size SMD package



TN_T

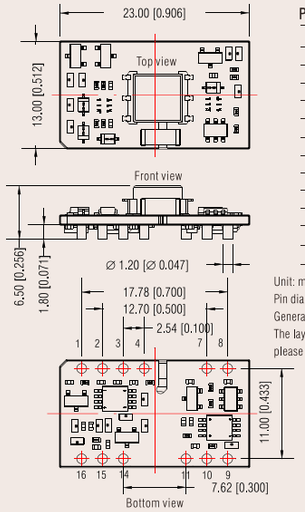
CE RoHS

Product Program

Model number	Input power 1 / Input power2	Input signal	Output signal
TN555T	12V/12V	0-10V	0-10V
TN655T		0-5V	0-10V
TN755T		0-2.5V	0-10V
TN565T		0-10V	0-5V
TN575T		0-10V	0-2.5V
TN875T		0.5-2.5V	0-2.5V
TN865T		0.5-2.5V	0-5V
TN511T	12V/15V	0-10V	4-20mA
TN611T		0-5V	4-20mA
TN711T		0-2.5V	4-20mA
TN521T		0-10V	0-20mA
TN621T		0-5V	0-20mA
TN721T		0-2.5V	0-20mA

Package Dimension

1 TN_T(current output type) Series: LxWxH: 23.00x13.00x6.50(mm)

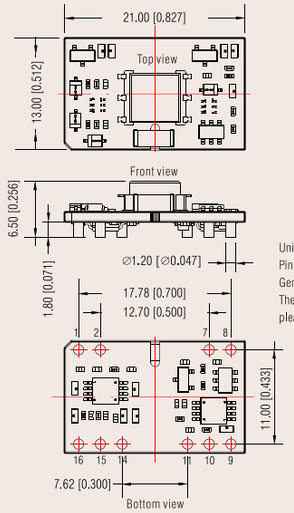


Pin-Out

Pin	Function
1	Pin2-
2	Pin2+
3	GR+
4	SG
7	Pin1+
8	Pin1-
9	Sin+
10	SZ
11	ZR
14	GR-
15	Sout-
16	Sout+

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

2 TN_T(Voltage output type)Series: LxWxH: 21.00x13.00x6.50(mm)



Pin-Out

Pin	Function
1	Pin2-
2	Pin2+
7	Pin1+
8	Pin1-
9	Sin+
10	SZ
11	ZR
14	SG
15	Sout-
16	Sout+

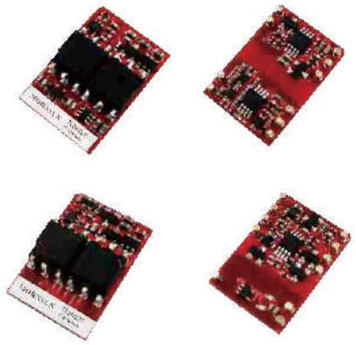
Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]
The layout of the device is for reference only, please refer to the actual product

Signal Conditioning Module

Active High Precision Positive Signal

Features:

- Isolation voltage 2000VAC/60s
- Integrated power supply, two-port isolation (signal input and signal output)
- Frequency response ≥ 2kHz
- Full and zeros adjustment functions
- High linearity of 0.1% Full Scale
- Low ripple & noise: ≤30mVpp, 20MHz
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)
- Compact size: SMD16 package (21.00x14.50x6.40mm)



TE_T

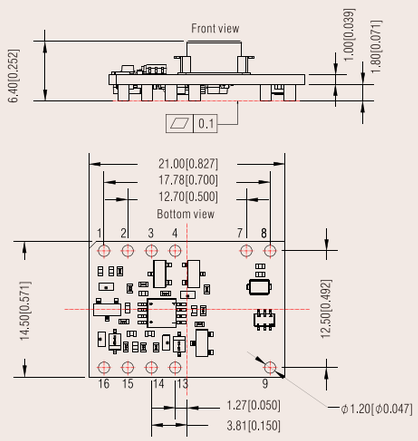
RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TE1660T	5	4-20mA	0-5V	None
TE6660T	5	0-5V	0-5V	None

Package Dimension

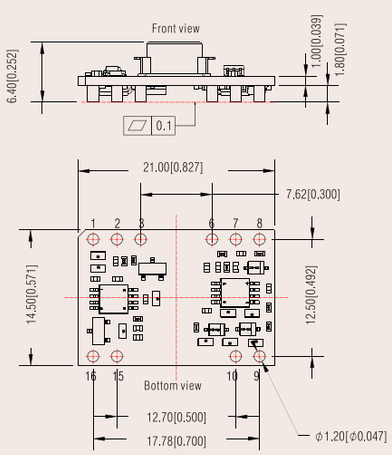
① TE1660T Series: LxWxH: 21.00x14.50x6.40(mm)



Pin-Out		
Pin	Designation	Function
1	Sout+	Signal output(+)
2	Sout-	Signal output(-)
3	SG	Gain regulation
4	SZ	Zero regulation
7	Sin-	Signal input(-)
8	Sin+	Signal input(+)
9	NC	No function pin
13	SZ-	Zero auxiliary regulation(-)
14	SZ+	Zero auxiliary regulation(+)
15	Pin-	Power input(-)
16	Pin+	Power input(+)
NC: Notavailable for electrical connection		

Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.5[±0.020]
The layout of the device is for reference only, please refer to the actual product.

② TE6660T Series: LxWxH: 21.00x14.50x6.40(mm)



Pin-Out		
Pin	Designation	Function
1	Sout+	Signal output(+)
2	Sout-	Signal output(-)
3	SG	Gain regulation
6	SZ	Zero regulation
7	Sin-	Signal input(-)
8	Sin+	Signal input(+)
9	SZ+	Zero auxiliary regulation(+)
10	SZ-	Zero auxiliary regulation(-)
15	Pin-	Power input(-)
16	Pin+	Power input(+)

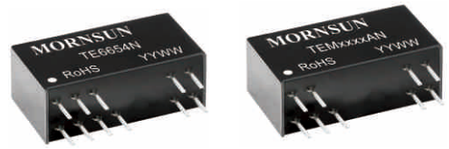
Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.5[±0.020]
The layout of the device is for reference only, please refer to the actual product.

Signal Conditioning Module

Active High Precision Positive Signal

Features:

- Isolation voltage 2000VDC/60s
- Two-port isolation (signal input and signal output)
- Frequency response ≥ 2kHz
- Full and zeros adjustment functions
- High linearity of 0.1% Full Scale
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)
- DIP package



TE_N

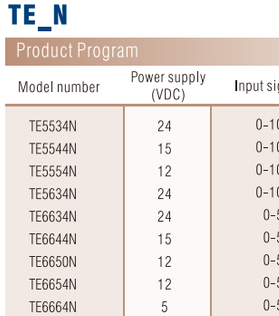
CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TE5534N	24	0-10V	0-10V	15V
TE5544N	15	0-10V	0-10V	15V
TE5554N	12	0-10V	0-10V	15V
TE5634N	24	0-10V	0-5V	15V
TE6634N	24	0-5V	0-5V	15V
TE6644N	15	0-5V	0-5V	15V
TE6650N	12	0-5V	0-5V	None
TE6654N	12	0-5V	0-5V	15V
TE6664N	5	0-5V	0-5V	15V
TE1533N	24	4-20mA	0-10V	24V
TE1530N	24	4-20mA	0-10V	None
TE1550N	12	4-20mA	0-10V	None
TE1633N	24	4-20mA	0-5V	24V
TE1630N	24	4-20mA	0-5V	None
TE1650N	12	4-20mA	0-5V	None
TE1660N	5	4-20mA	0-5V	None
TE1430N	24	4-20mA	1-5V	None
TE1433N	24	4-20mA	1-5V	24V
TE1450N	12	4-20mA	1-5V	None
TE1S34N-2.5	24	4-20mA	0-2.5V	15V
TE1S60N-2.5	5	4-20mA	0-2.5V	None
TE1S60N-3.3	5	4-20mA	0-3.3V	None
TE1S65N-3.3	5	4-20mA	0-3.3V	12V
TESS64N-1-1	5	0-1V	0-1V	15V
TE2530N	24	0-20mA	0-10V	None
TE2650N	12	0-20mA	0-5V	None
TE6S6SN-3.3-9	5	0-5V	0-3.3V	9V

Package Dimension

① TE_N Series: LxWxH: 26.00x9.50x12.50(mm)



Unit: mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

Pin-Out

Designation	Function
1(Sout+)	Signa output(+)
2(Sout-)	Signa output(-)
3(SG)	Gain regulation
8(Sin-)	Singnal input(-)
9(Sin+)	Singnal input(+)
10(Pout+)	Isolation power output(+)
11(Pout-)	Isolation power output(-)
*15(ZR)	Zero auxiliary regulation
16(SZ)	Zero regulation
17(Pin-)	Power input(-)
18(Pin+)	Power input(+)

*Note:the power supply of 24V withou 15 Pin

TE_AN

CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TE5530AN	24	−10Vto10V	0-0V	None
TE5650AN	12	-10Vto10V	0-5V	None
TE6630AN	24	-5Vto5V	0-5V	None
TE6650AN	12	-5Vto5V	0-5V	None

TE_CN

CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TE5540CN	15	±10V	±10V	None
TE5550CN	12	±10V	±10V	None
TE6640CN	15	±5V	±5V	None
TE6650CN	12	±5V	±5V	None

TEM_AN

CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TEM5630AN	24	±75mV	0-5VDC	None
TEM6650AN	12	±100mV	0-5VDC	None
TEM6640AN	15	±100mV	0-5VDC	None

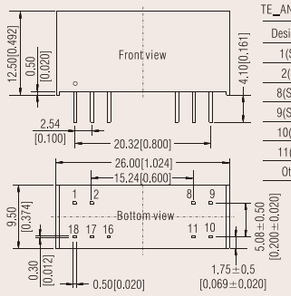
TEM_CN

CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TEM4540CN	15	±50mV	±10V	None
TEM6540CN	15	±100mV	±10V	None
TEM6640CN	15	±100mV	±5V	None
TEM7650CN	12	±200mV	±5V	None

② TE_AN/CN,TEM_AN/CN Series: LxWxH: 26.00x9.50x12.50(mm)



Unit: mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.250[±0.010]

TE_AN/CN **Pin-Out**

Designation	Function
1(Sin+)	Signa input(+)
2(Sin-)	Signa intput(-)
8(Sout−)	Signal output(-)
9(Sout+)	Signal output(+)
10(Pin+)	Power supply(+)
11(GND)	Distribution GND
Others:	NC

TEM_AN/CN **Pin-Out**

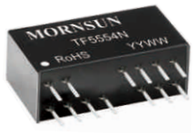
Designation	Function
1(Sin+)	Signal input(+)
2(Sin-)	Signal input(-)
8(Sout−)	Signal output(-)
9(Sout+)	Signal output(+)
10(Pin+)	Power input(+)
11(GND)	GND
16(Pout-)	Isolation power output(-)
17(COM)	COM
18(Pout+)	Isolation power output(+)

Signal Conditioning Module

Active High Precision Output Signal

Features:

- Isolation voltage 2000VAC/60s
- Two-port isolation (signal input and signal output)
- Frequency response ≥ 2kHz
- Full and zeros adjustment functions
- High precision & linearity: 0.1% F.S.
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)



TF_N

CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TF5134N	24	0-10V	4-20mA	15
TF5234N	24	0-10V	0-20mA	15
TF5534N	24	0-10V	0-10V	15
TF5554N	12	0-10V	0-10V	15
TF5634N	24	0-10V	0-5V	15
TF6134N	24	0-5V	4-20mA	15
TF6234N	24	0-5V	0-20mA	15
TF6250N	12	0-5V	0-20mA	None
TF6254N	12	0-5V	0-20mA	15
TF6664N	5	0-5V	0-5V	15
TFS160N-3.3 RoHS	5	0-3.3V	4-20mA	None

TF_GN

CE RoHS

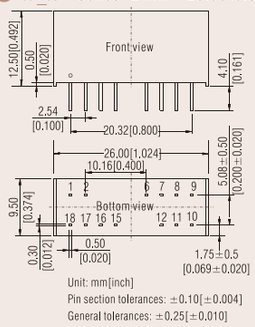
Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TF6550GN	12	0-5V	−10V to +10V	None

Note: Customization is acceptable.

Package Dimension

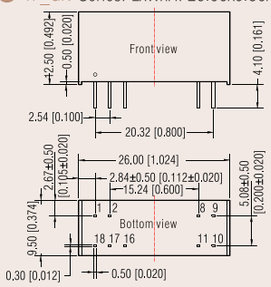
① TF_N Series: LxWxH: 26.00x9.50x12.50(mm)



Pin-Out

Pin	Function
1(Sout+)	Signal output(+)
2(Sout-)	Signal output(-)
6(GR)	Gain auxiliary regulation
7(SG)	Gain regulation
8(Sin-)	Singnal input(-)
9(Sin+)	Singnal input(+)
10(Pin+)	Power input(+)
11(Pin-)	Power input(-)
12(NC)	No connection
15(ZR)	Zero auxiliary regulation
16(SZ)	Zero regulation
17(Pout-)	Isolation power output(-)
18(Pout+)	Isolation power output(+)

② TF_GN Series: LxWxH: 26.00x9.50x12.50 (mm)



Pin-Out

1	Sout+	Signal output(+)
2	Sout-	Signal output(-)
8	Sin-	Signal input(-)
9	Sin+	Signal input(+)
10	Pin+	Power input(+)
11	Pin-	Power input(-)
16	Pout-	Isolation power output(-)
17	PGND	GND
18	Pout+	Isolation power output(+)

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

Signal Conditioning Module

Active High Precision PWM Output Signal

Features:

- Isolation voltage 2000VAC/60s
- Two-port isolation (signal input and signal output)
- Low ripple & noise (≤30mVpp, 20MHz)
- High linearity of 0.1% Full Scale
- Extremely low-temperature coefficient: 50PPM/℃ (TYP., within -40℃ to +85℃)
- Digital signal (PWM)

TFW_N

CE RoHS

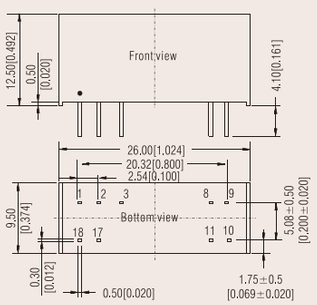
Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TFW260N	5	0-100	0-20mA	None
TFW560N	5	0-100	0-10V	None
TFW660N	5	0-100	0-5V	None

Note: Over nominal loop power voltage may damage modules.

Package Dimension

① TFW_N Series: LxWxH: 26.00x9.50x12.50(mm)



Pin-Out

Pin	Function
1(Sout+)	Signal output(+)
2(Sout−)	Signal output(-)
3(NC)	No Connection
8(Sin−)	Signal input(-)
9(Sin+)	Signal input (+)
10(Pin+)	Power input(+)
11(Pin-)	Power input(-)
17(NC)	No Connection
18(NC)	No Connection

Unit: mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

Signal Conditioning Module

Active High Precision Signal (Versatile Type)

Features:

- Isolation voltage: 2500VAC/60s
- Four-port isolation (T_P), three-port isolation (T_CP)
- High precision & linearity: 0.1% F.S.
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)
- Signal output: please refer to the product selection guide
- Low cost, compact package, high reliability, convenient to use

T_P

RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
T1130P	24	4-20mA	4-20mA	None
T1133P	24	4-20mA	4-20mA	24
T1430P	24	4-20mA	1-5V	None
T1433P	24	4-20mA	1-5V	24
T1450P	12	4-20mA	1-5V	None
T1530P	24	4-20mA	0-10V	None
T1533P	24	4-20mA	0-10V	24
T1630P	24	4-20mA	0-5V	None
T1633P	24	4-20mA	0-5V	24
T1650P	12	4-20mA	0-5V	None
T1S33P-2.5	24	4-20mA	0-2.5V	24
T2230P	24	0-20mA	0-20mA	None
T2233P	24	0-20mA	0-20mA	24
T2633P	24	0-20mA	0-5V	24
T2650P	12	0-20mA	0-5V	None
T4130P	24	1-5V	4-20mA	None
T4630P	24	1-5V	0-5V	None
T5130P	24	0-10V	4-20mA	None
T5133P	24	0-10V	4-20mA	24
T5150P	12	0-10V	4-20mA	None
T5153P	12	0-10V	4-20mA	24
T5230P CE	24	0-10V	0-20mA	None
T5530P CE	24	0-10V	0-10V	None
T5533P	24	0-10V	0-10V	24
T5535P	24	0-10V	0-10V	12
T5544P	15	0-10V	0-10V	15
T5550P	12	0-10V	0-10V	None
T5555P	12	0-10V	0-10V	12
T5630P	24	0-10V	0-5V	None

T_CP

RoHS

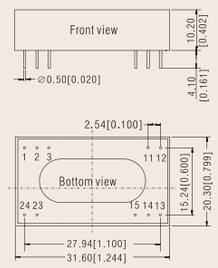
Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
T6630CP	24	±5V	±5V	None
T5530CP	24	±10V	±10V	None
T6660CP	5	±5V	±5V	None
T5540CP	15	±10V	±10V	None
T6640CP	15	±5V	±5V	None
T5550CP	12	±10V	±10V	None
T6650CP	12	±5V	±5V	None

Note: Customization is acceptable.

Package Dimension

① TxxxxP Series: LxWxH: 31.60x20.30x10.20(mm)

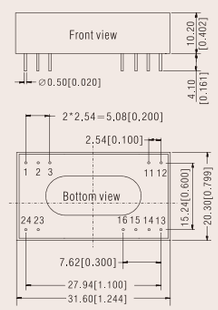


Pin-Out

Pin	Vo	Io	Function
1	Sout-	Sout-	Signal output(-)
2	No Pin	Sout+	Signal output(+)
3	Sout+	No Pin	Signal output(+)
11	Sin+	Sin+	Singnal input(+)
12	Sin-	Sin-	Singnal input(-)
13	Pout-	Pout-	Isolation power output-
14	Pout+	Pout+	Isolation power output+
15	NC	NC	No Connection
23	Pin+	Pin+	Power supply(+)
24	Pin-	Pin-	Power supply(-)

NC: No function pin.
Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.25±0.010]

② TxxxxCP Series: LxWxH: 31.60x20.30x10.20(mm)



Pin-Out

Pin	Vo	Io	Function
1	Sout-	Sout-	Signal output(-)
2	NC	Sout+	Signal output(+)
3	Sout+	NC	Signal output(+)
11	Sin+	Sin+	Singnal input(+)
12	Sin-	Sin-	Singnal input(-)
13	NC	NC	No Connection
14	NC	NC	No Connection
15,16	NC	NC	No Connection
23	Pin+	Pin+	Power supply(+)
24	Pin-	Pin-	Power supply(-)

NC: No function pin.
Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Signal Conditioning Module

Active High Precision (mV-class Input) Signal

Features:

- Three-port isolation (signal input, signal output and power supply)
- High precision & linearity: 0.1% F.S.
- Isolation voltage: 2500VDC
- Extremely low-temperature coefficient: 35PPM/℃(within -25℃ to +71℃)
- Low cost, compact size, high reliability, convenient to use

TM_P

RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TM1130P	24	0-10mV	4-20mA	None
TM3130P	24	0-30mV	4-20mA	None
TM4130P	24	0-50mV	4-20mA	None
TM4150P	12	0-50mV	4-20mA	None
TM5230P	24	0-75mV	0-20mA	None
TM6130P	24	0-100mV	4-20mA	None
TM2550P	12	0-20mV	0-10V	None
TM2650P	12	0-20mV	0-5V	None
TM3650P	12	0-30mV	0-5V	None
TM4530P	24	0-50mV	0-10V	None
TM4630P	24	0-50mV	0-5V	None
TM4650P	12	0-50mV	0-5V	None
TM4660P	5	0-50mV	0-5V	None
TM4S50P-2.5	12	0-50mV	0-2.5V	None
TM5530P	24	0-75mV	0-10V	None
TM5630P	24	0-75mV	0-5V	None
TM5650P	12	0-75mV	0-5V	None
TM6530P	24	0-100mV	0-10V	None
TM6630P	24	0-100mV	0-5V	None
TM6650P	12	0-100mV	0-5V	None
TM6S50P-3.3	12	0-100mV	0-3.3V	None
TM2S60P-2.5	5	0-20mV	0-2.5V	None
TM5130P	24	0-75mV	4-20mA	None
TM6660P	5	0-100mV	0-5V	None

TM_CP

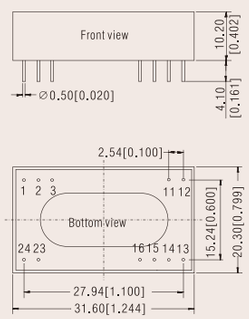
RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TM1630CP	24	±10mV	±5V	None
TM2630CP	24	±20mV	±5V	None
TM4630CP	24	±50mV	±5V	None
TM5630CP	24	±75mV	±5V	None
TM6630CP	24	±100mV	±5V	None
TM7650CP	12	±200mV	±5V	None
TM4530CP	24	±50mV	±10V	None
TM5530CP	24	±75mV	±10V	None
TM6530CP	24	±100mV	±10V	None

Package Dimension

① TM_P/TM_CP Series: LxWxH: 31.60x20.30x10.20(mm)



Pin-Out

Pin	Vo	Io	Function
1	Sout-	Sout-	Signal output(-)
2	NC	Sout+	Signal output(+)
3	Sout+	NC	Signal output(+)
11	Sin+	Sin+	Singnal input(+)
12	Sin-	Sin-	Singnal input(-)
13,14	NC	NC	no connection
15,16	NC	NC	no connection
23	Pin+	Pin+	Power supply(+)
24	Pin-	Pin-	Power supply(-)

NC: no connection.

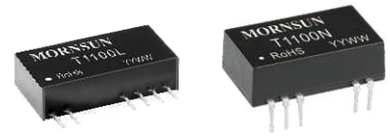
Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Signal Conditioning Module

Passive High Precision Signal

Features:

- Isolation voltage: 3000VDC
- Two-port isolation (signal input and signal output)
- High precision & linearity: 0.1% F.S.
- Extremely low-temperature coefficient: 35PPM/℃
- Low voltage-drop: 3V Typ. (20mA input)
- High reliability (MTBF > 500,000 hours)



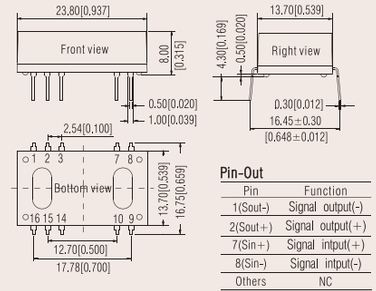
Product Program

Model number	Power supply	Input signal	Output signal	Isolated power output	Channel	Markings & Datasheet
T1100N	None	4-20mA	4-20mA	None	1	CE RoHS
T1100L	None	4-20mA	4-20mA	None	1	CE RoHS
T1100L-F	10-24VDC	4-20mA	4-20mA	None	1	CE RoHS

Note: Over nominal loop power voltage may damage modules.

Package Dimension

① T1100N Series: LxWxH: 23.80x16.75x8.00(mm)



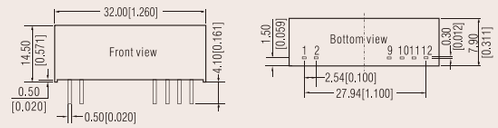
Pin-Out

Pin	Function
1(Sout-)	Signal output(-)
2(Sout+)	Signal output(+)
7(Sin+)	Signal intput(+)
8(Sin-)	Signal intput(-)
Others	NC

NC:no connection.

Unit: mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

② T1100L/L-F Series: LxWxH: 32.00x7.90x14.50(mm)



T1100L Pin-Out

Pin	Function
1(Iin+)	Signal intput(+)
2(Iin-)	Signal intput(-)
9,10(Iout-)	Signal output(-)
11,12(Iout+)	Signal output(+)

T1100L-F Pin-Out

Pin	Function
1(Vin+)	Power intput
2(Io)	Current output
9,10(Iin)	Current intput
11,12(Vout)	Power output

Unit: mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

Signal Conditioning Module

Two-wire Loop Power Supply Signal (With HART)

Features:

- 4-20mA output loop stealing, 3.3V regulated output (loop power)
- Isolation voltage: 2000VAC/1mA/60s
- High precision & linearity: 0.1% F.S.
- Extremely low-temperature coefficient: 50PPM/℃
- HART compatible
- Convert digital signal (PWM) into 4-20mA (TW147HL)

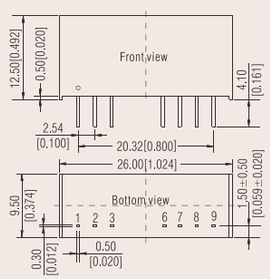
Product Program

Model number	Power supply input	Input signal	Output signal	Isolated power output	Markings & Datasheet
T797HL	15-24V	0-2.5V	3.7-22mA	3.3V	CE RoHS
T747HL	10-24V	0-2.5V	3.7-22mA	3.3V	
T747L	10-24V	0-2.5V	3.7-22mA	3.3V	CE RoHS

Note: Customization is acceptable. T747L is without HART.

Package Dimension

① T_HL/T_L Series: LxWxH: 26.00x9.50x12.50(mm)



Pin-Out

Pin	Function
1(Vin)	Power supply+
2(Io)	Current output
3(HART_IN)	HART Signal input
6(HART_OUT)	HART Signal output
7(0V/Si-)	Signal input-/Isolated output-
8(Si+)	Signal input+
9(Vo+)	Isolated output+

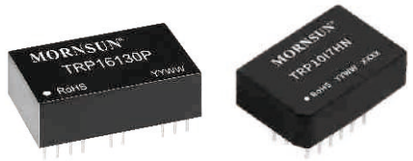
Unit: mm[inch]
Pin section tolerances: ±0.10[±0.004]
General tolerances: ±0.25[±0.010]

Signal Conditioning Module

Active Detection Type RTD Signal

Features:

- Two-wire, three-wire, four-wire pt100 RTD signal input
- Isolation voltage: 2000VAC
- High precision & linearity: 0.1% F.S.
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)
- International standard signal output: 4-20mA/0-5V/0-10V etc.
- Low cost, compact size, high reliability, convenient to use



TRP_P

CE RoHS

Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TRP16130P	24	Pt100(0℃to+200℃)	4-20mA	None
TRP15130P	24	Pt100(0℃to+100℃)	4-20mA	None
TRP18130P	24	Pt100(-50℃to+150℃)	4-20mA	None
TRP15S30R-2.5	24	Pt100(0℃to+100℃)	0-2.5V	None
TRP16150P	12	Pt100(0℃to+200℃)	4-20mA	None
TRP17130P	24	Pt100(0℃to+500℃)	4-20mA	None
TRP17150P	12	Pt100(0℃to+500℃)	4-20mA	None

TRP_HN

CE RoHS

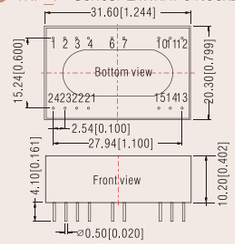
Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TRP1017HN	3.3	Pt100(-200℃to 850℃)	IIC	None

Note: Customization is acceptable.

Package Dimension

1 TRP_P Series: LxWxH: 31.60x20.30x10.20(mm)

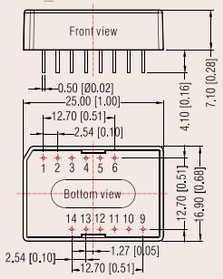


Pin-Out

Pin	Function	
1	Za1	Zero Adjustment 1
2	ZA2	Zero Adjustment 2
3	FB1	Amplitude Adjustment 1
4	FB2	Amplitude Adjustment 2
6	VD	Power Supply(+)
7	GND	Power Supply(-)
10	Vo+	Voltage Signal Output(-)
12	Vo-	Voltage Signal Output(-)
13	Io-	Current Signal Output(-)
15	Io+	Current Signal Output(+)
22	B	Thermal Resistance Signal Input B
23	B	Thermal Resistance Signal Input B
24	A	Thermal Resistance Signal Input A
others	NC	Pin to be isolated from circuit

Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

2 TRP_HN Series: LxWxH:25.00 x 16.90 x 7.10(mm)



Pin-Out

Pin	Function	Pin	Function
1	VDD	9	RA1
2	GND	10	RB1
3	SCL	11	RC1
4	SDA	12	RA2
5	A0	13	RB2
6	ALERT	14	Rc2

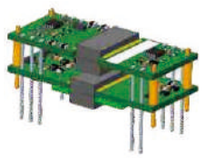
Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Signal Conditioning Module

Active High Precision High Isolation Signal

Features:

- Suitable for electric power and railway applications
- Isolation voltage: 4000VAC/60s
- Planar transformer bare board technology
- Two-port isolation (signal input and signal output)
- Low ripple & noise (≤30mVpp, 20MHz)
- Extremely low-temperature coefficient: 50PPM/℃ (TYP., within -40℃ to +85℃)



(Note: this picture is a design sketch, for the final picture please subject to the actual product.)

TE_HN

RoHS

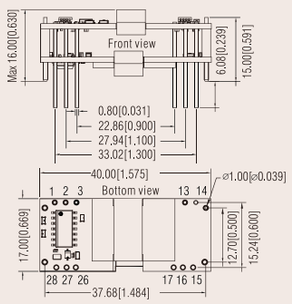
Product Program

Model number	Power supply (VDC)	Input signal	Output signal	Isolated power output
TE6650HN	12	0-5V	0-5V	None

Note: Customization is acceptable.

Package Dimension

1 TE6650HN Series: LxWxH: 40.00x17.00x16.00(mm)



Pin-Out

Pin	Function	Pin	Function
1	Sout-	15	Pout-
2	Sout+	16	Pout+
3	NC	17	NC
13	Sin+	26	NC
14	Sin-	27	Pin+
		28	Pin-

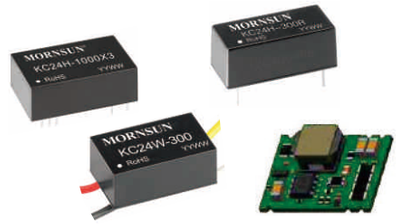
Unit: mm[inch]
Pin diameter tolerances: ±0.10[±0.004]
General tolerances: ±0.50[±0.020]

LED Driver

Great Power Constant Current LED Driver

Features:

- Operating temperature: -40℃ to +85℃
- Efficiency up to 97%
- Constant current mode, great power output
- Analogue dimming + PWM dimming
- Remote ON/OFF
- Continuous short-circuit protection



KC24H-R

CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
KC24H-300R(X1/X2/X3)	24(5.5-46)	3.3-36	0-300	95
KC24H-350R(X1/X2/X3)		3.3-36	0-350	95
KC24H-500R(X1/X2/X3)		3.3-36	0-500	95
KC24H-600R(X1/X2/X3)		3.3-36	0-600	95
KC24H-700R(X1/X2/X3)		3.3-36	0-700	95

Notes:
1. Series without a suffix such as KC24H-300R, this product is a four-pin product without the functions of analogue dimming and PWM dimming
2. Series with a suffix X1 such as KC24H-300RX1, this product is a five-pin product only with the function of analogue dimming..
3. Series with a suffix X2 such as KC24H-300RX2, this product is a five-pin product only with the function of PWM dimming.
4. Series with a suffix X3 such as KC24H-300RX3, this product is a six-pin product with the functions of analogue dimming and PWM dimming.

KC24W

CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
KC24W-300(X1/X2/X3)	24(5.5-48)	3.3-36	0-300	96
KC24W-350(X1/X2/X3)		3.3-36	0-350	96
KC24W-500(X1/X2/X3)		3.3-36	0-500	96
KC24W-600(X1/X2/X3)		3.3-36	0-600	96
KC24W-700(X1/X2/X3)		3.3-36	0-700	96

Notes:
1. Series without a suffix such as KC24H-300R, this product is a four-pin product without the functions of analogue dimming and PWM dimming
2. Series with a suffix X1 such as KC24H-300RX1, this product is a five-pin product only with the function of analogue dimming.
3. Series with a suffix X2 such as KC24H-300RX2, this product is a five-pin product only with the function of PWM dimming.
4. Series with a suffix X3 such as KC24H-300RX3, this product is a six-pin product with the functions of analogue dimming and PWM dimming.

KC24H-1000

CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
KC24H-1000(X1/X2/X3)	24(5.5-48)	3.3-36	1000	97

Notes:
1. Series without a suffix such as KC24H-300R, this product is a four-pin product without the functions of analogue dimming and PWM dimming
2. Series with a suffix X1 such as KC24H-300RX1, this product is a five-pin product only with the function of analogue dimming..
3. Series with a suffix X2 such as KC24H-300RX2, this product is a five-pin product only with the function of PWM dimming.
4. Series with a suffix X3 such as KC24H-300RX3, this product is a six-pin product with the functions of analogue dimming and PWM dimming.

KC24H-1200

CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
KC24H-1000(X1/X2/X3)	24(5.5-48)	3.3-36	1200	97

KC24JT-R3

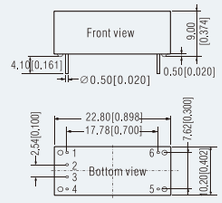
CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
KC24JT-300R3	24(6-36)	3.3-36	300	91/94
KC24JT-700R3		3.3-36	700	91/94

Package Dimension

1 KC24H-R Series: LxWxH: 22.80x10.20x9.00(mm)

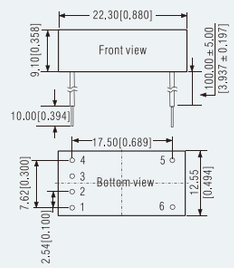


Pin-Out

Pin	Function	Comment
1	GND	Do not connect to-Vout
2	ON/OFF/PWM	Leave open if not use
3	Analog dimming	Leave open if not use
4	Vin	DC Supply
5	+Vout	LED Anode connection
6	-Vout	LED Cathode connection

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

2 KC24W Series: LxWxH: 22.30x12.55x9.10(mm)

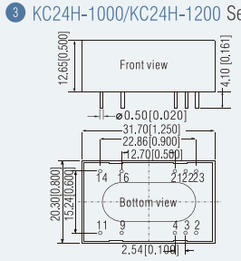


Pin-Out

Pin	Function	Comment
1(red)	+Vin	DC Supply
2(yellow)	AnalogDimming	Leave open if nou use
3(white)	ON/OFF/PWM	Leave open if nou use
4(black)	GND	Do not commect to-Vout
5(white)	-Vout	LED Cathode connection
6(yellow)	+Vout	LED Anode connection

Unit: mm[inch]
Lead internal diameter: 0.76[0.030];
Lead external diameter: 1.60[0.063];
Lead wire spec: UL1569 300V 105
Unmarked Tolerance: ±0.50[±0.020]

3 KC24H-1000/KC24H-1200 Series: LxWxH: 31.70x20.30x12.65(mm)

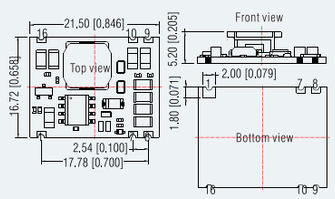


Pin-Out

Pin	Function	Comment
2,3	GND	Do not connect to -LED
4	ON/OFF/PWM	Leave open if not use
9,11	-LED	LED Cathode connection
14,16	+LED	LED Anode connection
21	Analogue dimming	Leave open if not use
22,23	+Vin	DC Supply

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]
Unmarked Tolerance: ±0.50[±0.020]

4 KC24JT Series: LxWxH: 21.50x16.72x5.20(mm)



Pin-Out

Pin	Function
1	GND
7	On/Off/PWM
8	-Vo
9	+Vo
10	Analogue Dimming
16	Vin

Unit: mm[inch]
General tolerance: ±0.50[±0.020]

IGBT Driver

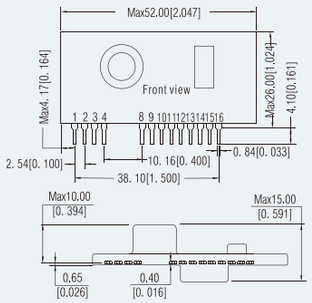
Hybrid Integrated IGBT Driver (Built-in Isolated DC/DC Converter)

Features:

- Built-in isolated DC-DC power supply, single power supply required
- Isolation voltage: 3750VAC
- Input signal frequency up to 20kHz
- Short-circuit and fault feedback functions
- Output cut-off after short circuit protection occurs and timing reset
- Adjustable fault detection rejection time (dead zone)
- Adjustable protective soft cut-off time

Package Dimension

1 QP12W08S-37/QP12W08S-37A
Series: LxWxH: 52.00x26.00x15.00(mm)



Pin-Out

Pin	Function
1	Power supply+
2	Power supply-
3	Drive signal input+
4	Drive signal input-
8	DC/DC converter output+
9	DC/DC converter output(COM)
10	DC/DC converter output-
11	Drive output
12	Collector of internal power tube
13	Detect of short circuit
14	Adjustment of Soft turn-off time
15	Fault signal output
16	Adjustment of short-circuit detection time delay

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
Unmarked Tolerance: ±0.50[±0.020]

Product Program

Model number	Nominal input voltage(VDC)	Input voltage range (VDC)	Output High-level voltage VOH (VDC)	Output low-level voltage VOL (VDC)	Max. driving current (A)	Switching frequency (Max.) (kHz)	Drive way	Isolation (VAC)	Markings & Datasheet
QP12W08S-37	15	14.5-15.5	15	−9	±8	20	1	3750	CE RoHS
QP12W08S-37A	12	11.6−12.4	15	−9	±8	20	1	3750	CE RoHS

IGBT Driver

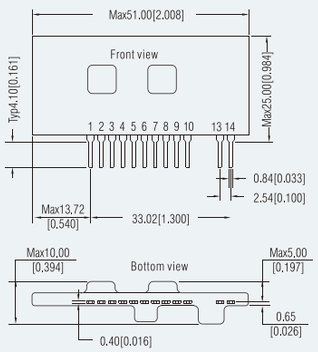
Hybrid Integrated IGBT Driver

Features:

- Built-in high CMRR opto-coupler (CMRR: Typ: 30KV/μs, Min.: 15KV/μs)
- High isolation (3700Vrms/min)
- Short-circuit protection and output fault function
- Output soft cut-off when over current occurs and timing reset
- Adjustable short-circuit detection rejection time (dead zone)
- Switching frequency up to 40kHz
- Suitable for 600V/600A, 1200V/400A and 1700V/200A series of IGBT
- Pin and characteristics compatible with M57962AL

Package Dimension

1 QC962-8A Series: LxWxH: 49.00x25.00x10.00(mm)



Pin-Out

Pin	Function
1	Fault detect
2	Reaction time
4	Power supply+
5	Drive output
6	Power supply-
7	Potective threshold adjustment
8	Fault signal output
13	Drive signal input-
14	Drive signal input+
3,9,10	NC

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

Product Program

Model number	Power voltage VCC (VDC)	Power voltage VEE (VDC)	Gate voltage (VDC)	Max. driving current (A)	Switching frequency (Max.) (kHz)	Drive way	Isolation (VAC)	Markings & Datasheet
QC962-8A	14−18	8	+14/-9	±8	40	1	3750	RoHS

• This catalog displays the latest products. If products in the brochure are not able to meet your needs, please contact our sales.

DC/DC Converter for SiC MOSFET Driver

Features:

- Efficiency up to 82%
- Isolation voltage: 3500VAC/6000VDC (QA051C: 3000VAC/5200VDC, QA151C3: 3500VAC/5000VDC)
- Ultra-low isolation capacitance (3.5pF)
- Operating temperature: -40℃ to +105℃
- Continuous short-circuit protection
- Specialized for SiC MOSFET driver

QAxx1C

RoHS

Product Program

Model number	Nominal Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (Typ)
QA01C	15(13.5-16.5)	+20/-4	+100/-100	80
QA051C	5(4.5-5.5)	+20/-5	+80/-40	79
QA1201C-20	12(10.8-13.2)	+20/-4	+100/-100	80
QA121C2	12(10.8-13.2)	+15/-3.5	+111/-111	81
QA121C-20	12(10.8-13.2)	+20/-5	+100/-100	79
QA151C	15(13.5-16.5)	+20/-5	+80/-40	78
QA01C-18	15(13.5-16.5)	+18/-3	+100/-100	79
QA151C3	15(13.5-16.5)	+15/-4	+100/-100	82
QA2401C-20	24(21.6-26.4)	+20/-4	+100/-100	80

QA151M

RoHS

Product Program

Model number	Nominal Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (Typ)
QA151M	15(13.5-16.5)	+15/-5	+100/-100	80

QA15115R2

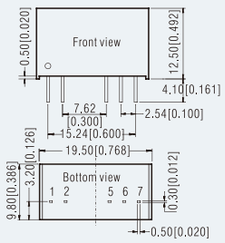
RoHS

Product Program

Model number	Nominal Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (Typ)
QA15115R2	15 (13.5-16.5)	+15/-2.5	+100/-100	80

Package Dimension

1 QAxx1C/QA15M/QA15115R2 Series: LxWxH: 19.50x9.80x12.50(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
5	-Vo
6	0V
7	+Vo

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.25[±0.010]

DC/DC Converter for IGBT Driver

Features:

- Operating temperature: -40℃ to +105℃
- Ultra-low isolation capacitance
- Isolation voltage: 3000VAC
- No-load operation allowed
- Ultra-miniature SIP package

QAxx

RoHS CB Report

Product Program

Model number	Nominal Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (Typ)
QA01	15(14.5-15.5)	+15/-8.7	+80/-40	80
QA01-09	15(14.5-15.5)	+9.0/--	+111/--	80
QA01-A09	15(14.5-15.5)	+9.0/-9.0	+55/-55	80
QA01-17	15(14.5-15.5)	+17/-8.7	+80/-40	80
QA02	12(11.6-12.4)	+15/-8.7	+80/-40	80
QA03	24(23.3-24.7)	+15/-8.7	+80/-40	80
QA04	12(9-15)	+15/-8.0	+100/-80	80

QAxx1

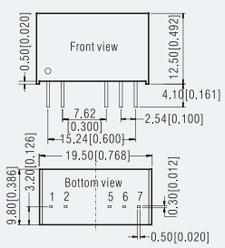
RoHS

Product Program

Model number	Nominal Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (Typ)
QA121	12(11.4-12.6)	+15/-8.0	+120/-120	81
QA151	15(14.25-15.75)	+15/-8.0	+120/-120	81
QA241	24(22.8-25.2)	+15/-8.0	+120/-120	81

Package Dimension

1 QAxx1/QAxx Series: LxWxH: 19.50x9.80x12.50(mm)



Pin-Out

Pin	Function
1	Vin
2	GND
*5	-Vo
6	0V
7	+Vo

*QA01-09 No connection to this pin.

Unit: mm[inch]
Pin section tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Great Power DC/DC Converter Specialized for IGBT Driver

Features:

- Operating temperature: -40℃ to +85℃ / –40℃ to +105℃ (QAU242D2G)
- Great power output
- High efficiency up to 87%
- High Isolation: 12000VDC
- Continuous short-circuit protection, self-recovery
- DIP package

QAWxx

RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
QAW01	12(9-18)	+15/-9	±200	85
QAW02	24(18-36)	+15/-9	±200	85

QA152D

CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
QA152D	15 (13.5-16.5)	+15/-9	+200/-200	87

QA156D-24

CE RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
QA156D-24	15 (13.5-16.5)	+24/+24	+150/0	80

QAU242D2G

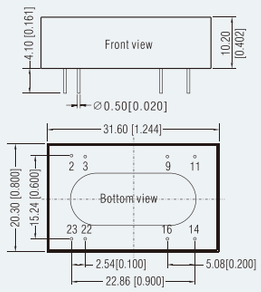
RoHS

Product Program

Model number	Input voltage (Nominal)	Output voltage (VDC)	Output current (mA)	Efficiency (%) (MAX)
QAU242D2G	24 (9-36)	+24/+24	+150/+150	85

Package Dimension

1 QAW01/QAW02/QA152D Series: LxWxH: 31.60x20.30x10.20(mm)

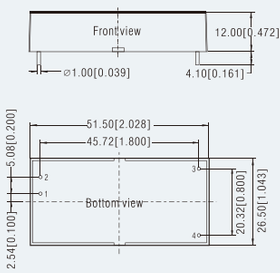


Pin-Out

Pin	Function
2,3	GND
9	0V
11	-Vo
14	+Vo
16	0V
22,23	Vin

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

2 QA152D-24 Series: LxWxH: 31.60x20.30x10.20(mm)

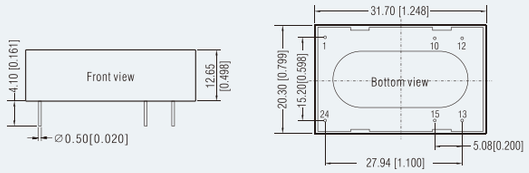


Pin-Out

Pin	Function
1	GND
2	Vin
3	+Vo
4	0V

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

3 QAU242D2G Series: LxWxH: 31.70x20.30x12.65(mm)



Pin-Out

Pin	Function
1	GND
10	-Vo1
12	+Vo1
13	+Vo2
15	-Vo2
24	Vin

Unit: mm[inch]
Pin diameter tolerance: ±0.10[±0.004]
General tolerance: ±0.50[±0.020]

• This catalog displays the latest products. If products in the brochure are not able to meet your needs, please contact our sales.

Caution

Purpose:

To prevent potential safety problems while using the products.

Scope:

AC/DC, DC/DC, EMC Auxiliary Device, Isolation Transmitter, LED Driver and IGBT Driver manufactured by Mornsun Guangzhou Science & Technology Co., Ltd.

Contents:

Users should comply to all the contents of Product Datasheet carefully before selection, design, or production, and design and use the products according the requirements of Product Datasheet.

Material requirements

- To avoid wrong phase, input and output wires should be in different colors.
- The input ground and protection ground must be firmly connected;The grounding resistance must meet the requirements of safety standards.
- Protect the device from electric shock and lightning. If the device is not lightning-proof, additional lightning protections must be taken.

Marking requirements

- The fuses, protection grounds and switches should be marked with distinct specs and symbols according to safety standards. Touchable dangerous high voltage and high temperature products should be marked with "Caution".

Input requirements

- If the input capacitor is large, connect a discharge circuit such as resistor to meet the requirements of safety standards.
- Voltage of input source must meet the requirements of "Product Datasheet" or "Technical Specification".

CAUTION

Safety guide for users

- Do not refit, disassemble or remove the outer case in case of electric shock or other damages.
  Improper use may cause short circuit, electric shock or other failures.

Isolation requirements between input, output and metal case (or ground)

- The clearance and creepage between the two wires of input and output must meet the requirements of safety standards.
- The clearance and creepage of input, output and metal case(or ground) must meet the requirements of safety standards.

Cautions

- Do not touch heat sinks or cases, as they might be hot.
- Do not touch input terminals and internal components of the products, in case of high temperature and high voltage.
- When the product is operating, keep your hand and face away from it to avoid any potential hurts.

Hot-plugging requirements

- If the product is not allowed for hot plug, please cut off the power before operation.

More information about application, please contact us.

Tel: 020-38601850 E-mail: fae801@mornsun.cn

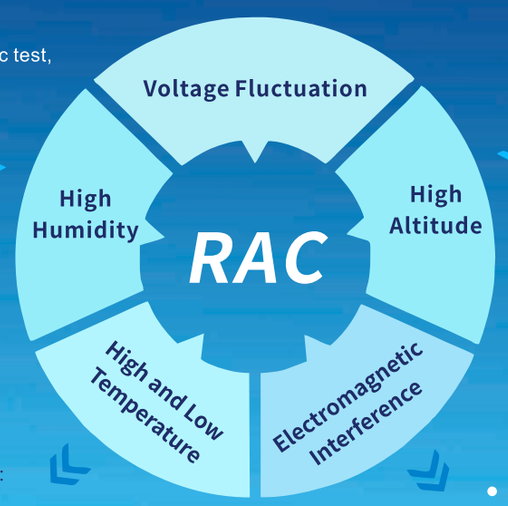
• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

MORNSUN®

305RAC

Reliable under All Conditions

- Input voltage may rise above 264vac when voltage fluctuation caused by load change or power source as generator



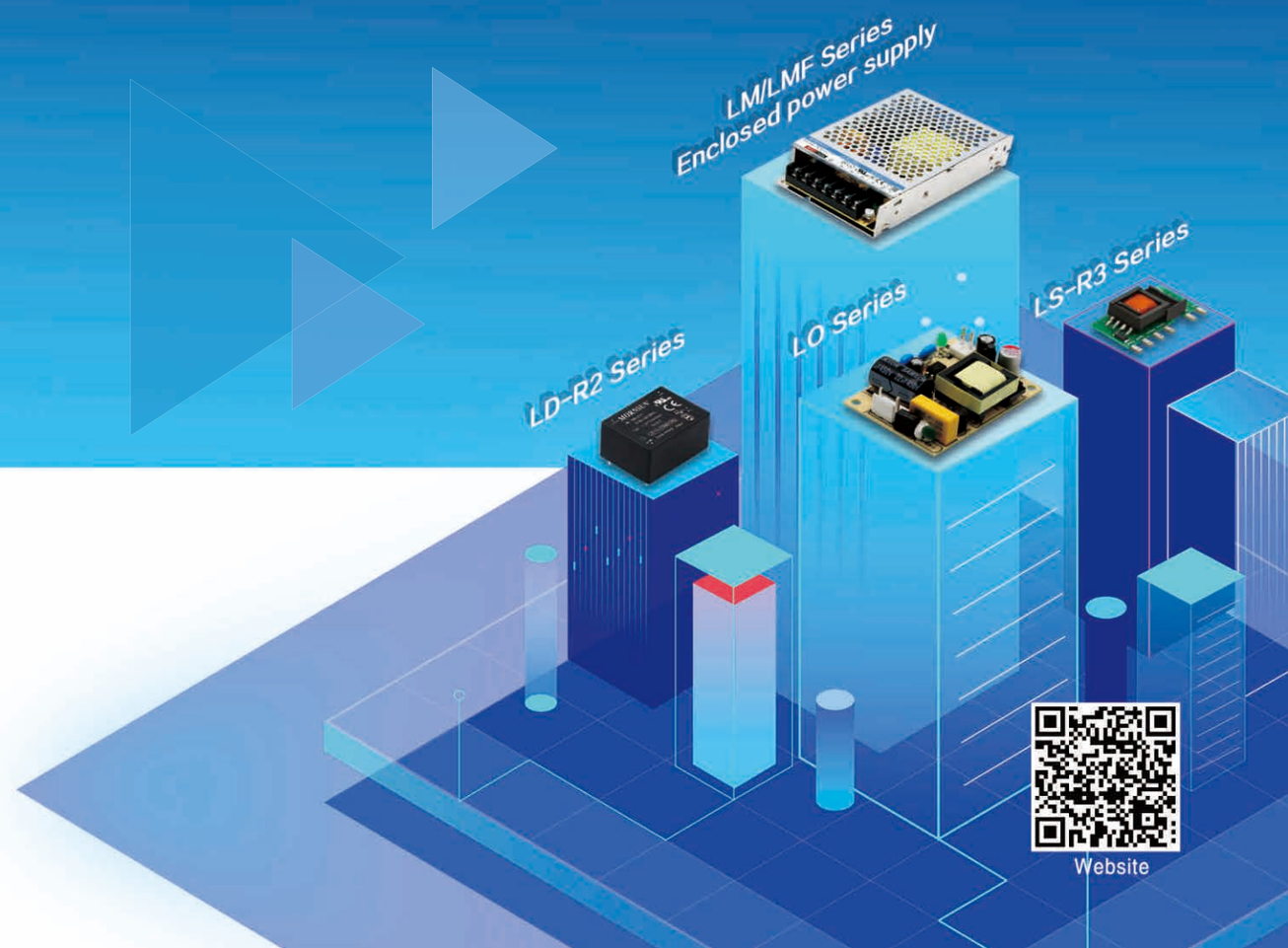
- Humidity test: Temperature/humidity cyclic test, High temperature and high humidity test, Constant temperature & humidity test
- Operation altitude up to 5000m Altitude simulation test: high temperature test, low temperature test, aging test, etc
- Low temperature: -25℃ to -40℃
- High temperature: +70℃ to +80℃
- Lightning/Surge Immunity
- EMI: CISPR32/EN55032 CLASS A/B

305

85-305VAC input voltage

RAC —— Reliable under All Conditions

Best-in-class performance. Handle the voltage fluctuation easily. High-input-voltage capability, high-low-temperature reliability, high-humidity reliability, high-altitude reliability and good EMC performance under almost any harsh conditions.



Website

Best-in-class performance

handle voltage fluctuations easily

Widely used in almost any harsh conditions

POWER-SUPPLY.IT SRL

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