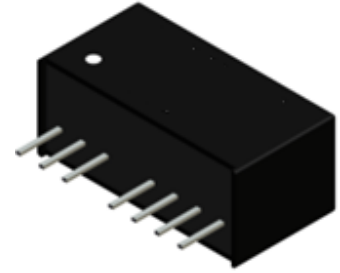


Features

- 2:1 Wide Input Voltage Range
- 2-3kVDC Isolation
- UL94V-0 package material
- Continuous Short Circuit Protection
- Low Ripple and Noise
- Remote On/Off Control
- Meet EN60601-1 certified

Application

- Industrial application



Selection Guide

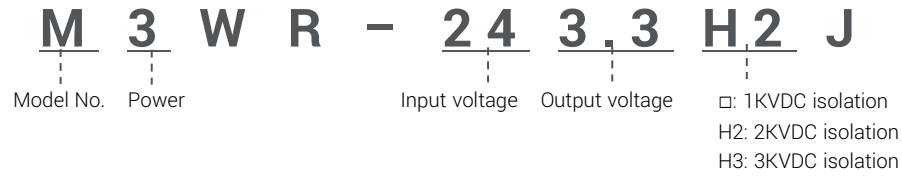
Part number	Input voltage	Output voltage	Output current @ full load	Efficiency ⁽¹⁾ (typ.)	Capacitive load ⁽²⁾ (max.)
M3WR-053.3H2J	4.5-9 VDC Nom. 5VDC	3.3 VDC	600 mA	72%	4700µF
M3WR-0505H2J		5 VDC	600 mA	73%	4700µF
M3WR-0509H2J		9 VDC	333 mA	74%	3300µF
M3WR-0512H2J		12 VDC	250 mA	77%	2200µF
M3WR-0515H2J		15 VDC	200 mA	80%	2200µF
M3WR-053.3DH2J		±3.3 VDC	±300 mA	72%	±2200µF
M3WR-0505DH2J		±5 VDC	±300 mA	74%	±2200µF
M3WR-0509DH2J		±9 VDC	±167 mA	76%	±2200µF
M3WR-0512DH2J		±12 VDC	±125 mA	77%	±1000µF
M3WR-0515DH2J		±15 VDC	±100 mA	78%	±1000µF
M3WR-123.3H2J	9-18 VDC Nom. 12VDC	3.3 VDC	600 mA	75%	4700µF
M3WR-1205H2J		5 VDC	600 mA	78%	4700µF
M3WR-1209H2J		9 VDC	333 mA	81%	3300µF
M3WR-1212H2J		12 VDC	250 mA	81%	2200µF
M3WR-1215H2J		15 VDC	200 mA	82%	2200µF
M3WR-123.3DH2J		±3.3 VDC	±300 mA	75%	±2200µF
M3WR-1205DH2J		±5 VDC	±300 mA	78%	±2200µF
M3WR-1209DH2J		±9 VDC	±167 mA	81%	±2200µF
M3WR-1212DH2J		±12 VDC	±125 mA	81%	±1000µF
M3WR-1215DH2J		±15 VDC	±100 mA	82%	±1000µF
M3WR-243.3H2J	18-36VDC Nom. 24VDC	3.3 VDC	600 mA	75%	4700µF
M3WR-2405H2J		5 VDC	600 mA	80%	4700µF
M3WR-2409H2J		9 VDC	333 mA	81%	3300µF
M3WR-2412H2J		12 VDC	250 mA	82%	2200µF
M3WR-2415H2J		15 VDC	200 mA	83%	2200µF
M3WR-243.3DH2J		±3.3 VDC	±300 mA	75%	±2200µF
M3WR-2405DH2J		±5 VDC	±300 mA	79%	±2200µF
M3WR-2409DH2J		±9 VDC	±167 mA	81%	±2200µF
M3WR-2412DH2J		±12 VDC	±125 mA	82%	±1000µF
M3WR-2415DH2J		±15 VDC	±100 mA	83%	±1000µF
M3WR-483.3H2J	36-72VDC Nom. 48VDC	3.3 VDC	600 mA	76%	4700µF
M3WR-4805H2J		5 VDC	600 mA	78%	4700µF
M3WR-4809H2J		9 VDC	333 mA	81%	3300µF
M3WR-4812H2J		12 VDC	250 mA	82%	2200µF
M3WR-4815H2J		15 VDC	200 mA	82%	2200µF
M3WR-483.3DH2J		±3.3 VDC	±300 mA	75%	±2200µF
M3WR-4805DH2J		±5 VDC	±300 mA	78%	±2200µF
M3WR-4809DH2J		±9 VDC	±167 mA	81%	±2200µF
M3WR-4812DH2J		±12 VDC	±125 mA	82%	±1000µF
M3WR-4815DH2J		±15 VDC	±100 mA	82%	±1000µF

1. The efficiency is test by nominal input and max. full load @25°C.
2. The capacitive load is test by minimum input and constant resistive load.
3. All specifications valid at nominal input voltage, full load and 25°C after warm-up time unless otherwise stated.

CTC is the professional and one among world's leading manufacturers of DC-DC/ AC-DC converters.

The products were used in Computers, Industrial controls, Medical equipment, Transportation, EV, ECO-power, Aero-space application and communication.

Part Number



Specifications

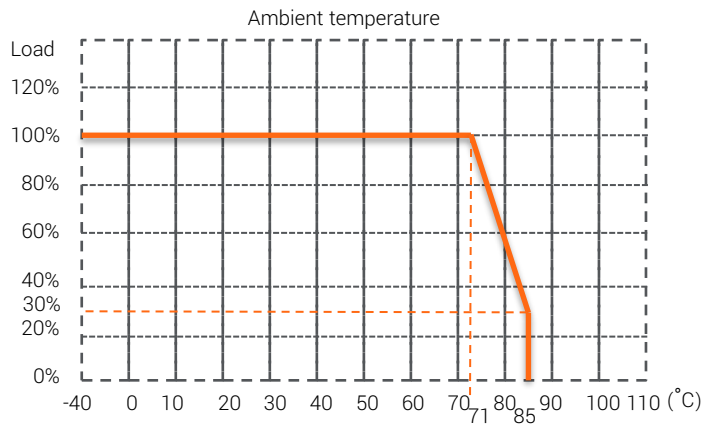
	Parameter	Conditions	Min.	Typ.	Max.	Unit
Input	Input voltage range				2:1	
	Voltage accuracy	Nominal Vin and full load		±2		%
Output	Line regulation	LL to HL, full load			±0.5	%
	Load regulation	20%-100% full load		±0.5		%
	Minimum load				10	%
	Ripple& noise	20MHz limited			50	mVp-p
	Switching frequency	full load		200		KHz
Environment	Operating temperature	With derating	-40		85	°C
	Storage temperature		-55		125	°C
	Relative humidity				95	%RH
	MTBF	+25°C	3303			KHours
Function	Isolation voltage	H2, 1 sec.	2000			VDC
		H3, 1 sec.	3000			VDC
	Isolation capacitance (At 100KHz)	H1			200	pF
		H2/H3			30	pF
	Isolation resistance		1			GΩ
	Short Circuit Protection				Continuous	
Physical	Safety approvals				EN60950-1/EN60601-1	
	Dimension	(L x W x H)			21.80x9.20x11.10 mm	
	Weight			4.7		g
EMC	EMI	EN55022			Class A/B	
	ESD	EN61000-4-2, Air±8kV; Contact±6kV			Criteria A	
	Radiated immunity	EN61000-4-3, 10V/m			Criteria A	
	Fast transient	EN61000-4-4, ±2kV			Criteria A	
	Surge	EN61000-4-5, ±2kV			Criteria A	
	Conducted immunity	EN61000-4-6, 10Vr.m.s			Criteria A	
	PMF	EN61000-4-8, 50Hz 1A/m (r.m.s)			Criteria A	

1. All specifications valid at nominal input voltage, full load and 25°C after warm-up time unless otherwise stated.
2. The product information and specifications are subject to change without prior notice.

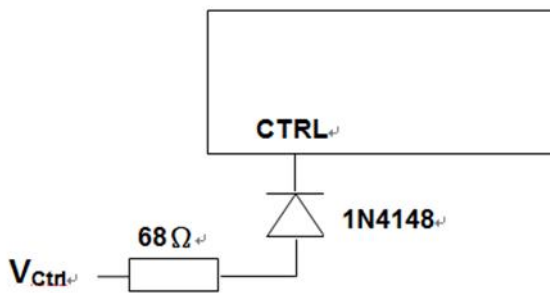
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Derating Curve



Application Circuit_CTRL ON/OFF

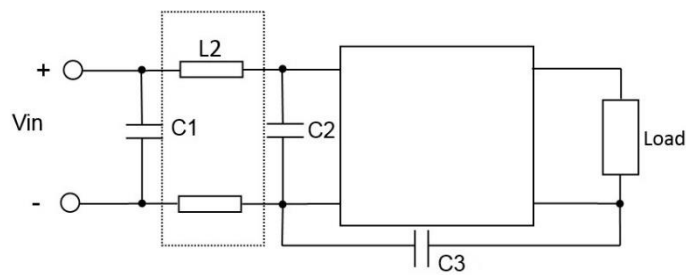


DC/DC ON : Open

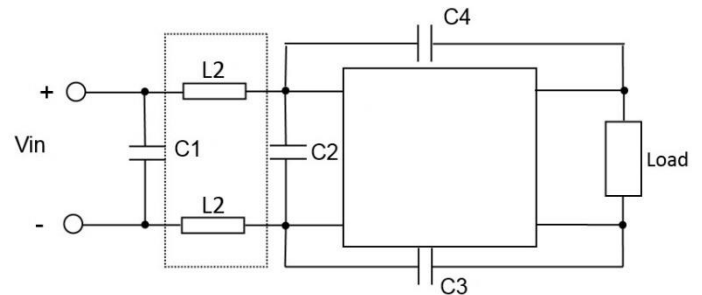
OFF : $5V \leq V_{ctrl} \leq 6V$

EMI Filtering-Suggestion for EN55022 Class A/B

EN55022 Class A



EN55022 Class B



EN55022 Class A

C1	C2	C3	L2
22uF	22uF	150PF	Choke 3uH

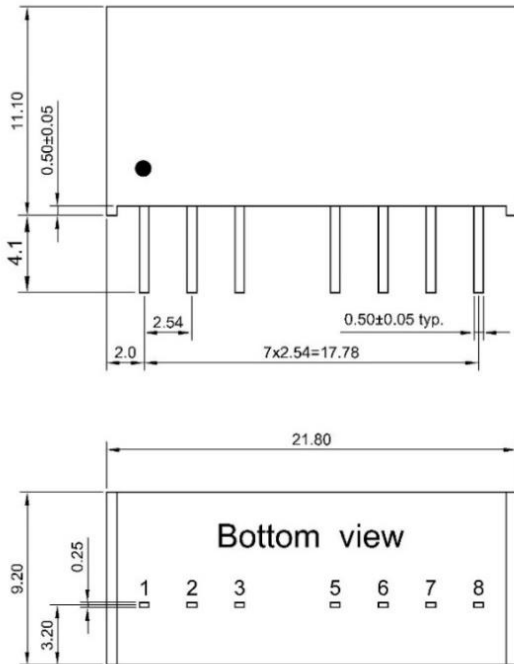
EN55022 Class B

C1	C2	C3	C4	L2
33uF	33uF	1000PF	1000PF	Common mode Choke 1mH

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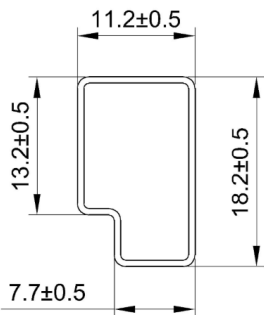
Mechanical Dimension & Pinning



Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	CTRL	CTRL
5	NC	NC
6	+Vout	+Vout
7	-Vout	Com
8	NC	-Vout

NC= No Connection
 Tolerance: XX.X ±0.5mm
 XX.XX ±0.25mm

Package



UNIT:mm
 1 Tube = 22 pcs
 Length:520±2mm

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