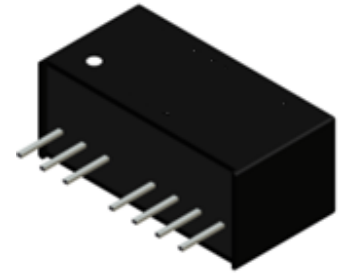


Features

- 2:1 Wide input voltage range
- 2 ~ 3KVDC Isolation
- Efficiency up to 82%
- Industrial standard SIP 8 package
- Excellent load and line regulation
- Continuous short circuit protection
- Low noise solution

Application

- Telecom/ Datacom
- Industry control system
- Measurement Equipment
- Semiconductor Equipment



Selection Guide

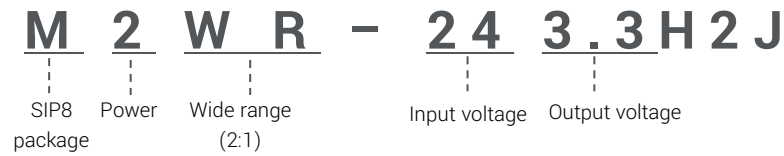
Part number	Input voltage	Output voltage	Output current @ full load	Efficiency ⁽¹⁾ (typ.)	Capacitive load ⁽²⁾ (max.)
M2WR-053.3H2J	4.5~9 VDC Nom. 5 VDC	3.3 VDC	500mA	68%	2200uF
M2WR-0505H2J		5 VDC	400mA	73%	1000uF
M2WR-0509H2J		9 VDC	222mA	74%	680uF
M2WR-0512H2J		12 VDC	166mA	75%	680uF
M2WR-0515H2J		15 VDC	134mA	75%	470uF
M2WR-053.3DH2J		±3.3 VDC	±250mA	68%	±1000uF
M2WR-0505DH2J		±5 VDC	±200mA	73%	±470uF
M2WR-0509DH2J		±9 VDC	±111mA	74%	±330uF
M2WR-0512DH2J		±12 VDC	±83mA	75%	±330uF
M2WR-0515DH2J		±15 VDC	±67mA	75%	±220uF
M2WR-123.3H2J	9~18 VDC Nom. 12 VDC	3.3 VDC	500mA	69%	2200uF
M2WR-1205H2J		5 VDC	400mA	75%	1000uF
M2WR-1209H2J		9 VDC	222mA	78%	680uF
M2WR-1212H2J		12 VDC	166mA	78%	680uF
M2WR-1215H2J		15 VDC	134mA	79%	470uF
M2WR-123.3DH2J		±3.3 VDC	±250mA	69%	±1000uF
M2WR-1205DH2J		±5 VDC	±200mA	75%	±470uF
M2WR-1209DH2J		±9 VDC	±111mA	78%	±330uF
M2WR-1212DH2J		±12 VDC	±83mA	78%	±330uF
M2WR-1215DH2J		±15 VDC	±67mA	79%	±220uF
M2WR-243.3H2J	18~36 VDC Nom. 24 VDC	3.3 VDC	500mA	70%	2200uF
M2WR-2405H2J		5 VDC	400mA	78%	1000uF
M2WR-2409H2J		9 VDC	222mA	79%	680uF
M2WR-2412H2J		12 VDC	166mA	79%	680uF
M2WR-2415H2J		15 VDC	134mA	80%	470uF
M2WR-243.3DH2J		±3.3 VDC	±250mA	70%	±1000uF
M2WR-2405DH2J		±5 VDC	±200mA	78%	±470uF
M2WR-2409DH2J		±9 VDC	±111mA	79%	±330uF
M2WR-2412DH2J		±12 VDC	±83mA	79%	±330uF
M2WR-2415DH2J		±15 VDC	±67mA	80%	±220uF
M2WR-483.3H2J	36~72 VDC Nom. 48 VDC	3.3 VDC	500mA	70%	2200uF
M2WR-4805H2J		5 VDC	400mA	78%	1000uF
M2WR-4809H2J		9 VDC	222mA	80%	680uF
M2WR-4812H2J		12 VDC	166mA	81%	680uF
M2WR-4815H2J		15 VDC	134mA	82%	470uF
M2WR-483.3DH2J		±3.3 VDC	±250mA	70%	±1000uF
M2WR-4805DH2J		±5 VDC	±200mA	78%	±470uF
M2WR-4809DH2J		±9 VDC	±111mA	80%	±330uF
M2WR-4812DH2J		±12 VDC	±83mA	81%	±330uF
M2WR-4815DH2J		±15 VDC	±67mA	82%	±220uF

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.

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

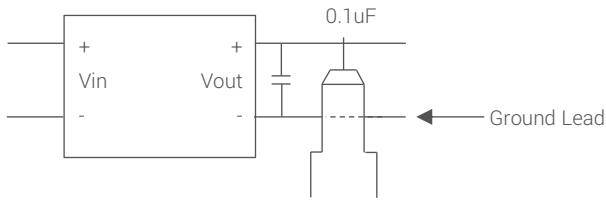
	Parameter	Conditions	Min.	Typ.	Max.	Unit	
Input	Input voltage range			2:1			
	Voltage accuracy			±2		%	
Output	Line regulation	HL to LL at full load			±0.5	%	
	Load regulation	20%-100% load at nominal Vin		±0.5		%	
	Ripple& noise	20MHz limited at full load			50	mVp-p	
	Switching frequency		200		900	KHz	
	CTRL pin drive current				3	6	mA
	Quiescent input current when converter is off						mA
Environment	Operating temperature	@100LFM	-40		100	°C	
	Storage temperature		-55		125	°C	
	Max. case temperature				105	°C	
	MTBF	+25°C	650			KHours	
Function	Isolation voltage	H2, 1 sec.	2			KVDC	
		H3, 1 sec.	3			KVDC	
	Isolation capacitance				200	pF	
	Isolation resistance		1			GΩ	
	Short Circuit Protection			Continuous automatic recovery			
	Safety approvals			EN60950-1			
Physical	Dimension	(L x W x H)		21.8x9.2x11.1 mm			
	Weight			4.7		g	
	Case material			Non-conductive plastic			
	Vibration			MIL-STD-202G			
EMC	EMI	EN55022		Class A/ Class B			
	ESD	EN61000-4-2, Air±8kV; Contact±6kV		Criteria A			
	Radiated immunity	EN61000-4-3, 10 V/m		Criteria A			
	Fast transient	EN61000-4-4, ± 2kV		Criteria A			
	Surge	EN61000-4-5, ± 2kV		Criteria A			
	Conducted immunity	EN61000-4-6, 10 Vr.m.s		Criteria A			
	PMF	EN61000-4-8, 50Hz 1A/m (r.m.s)		Criteria A			

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

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

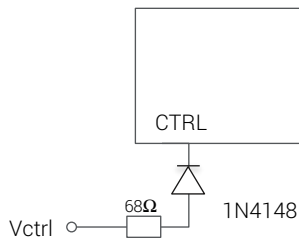
The products were used in Computers, Industrial controls, Medical equipment, Transportation, EV, ECO-power, Aero-space application and communication.

Ripple & noise



Measured with 20MHz bandwidth and 0.1uF ceramic capacitor.

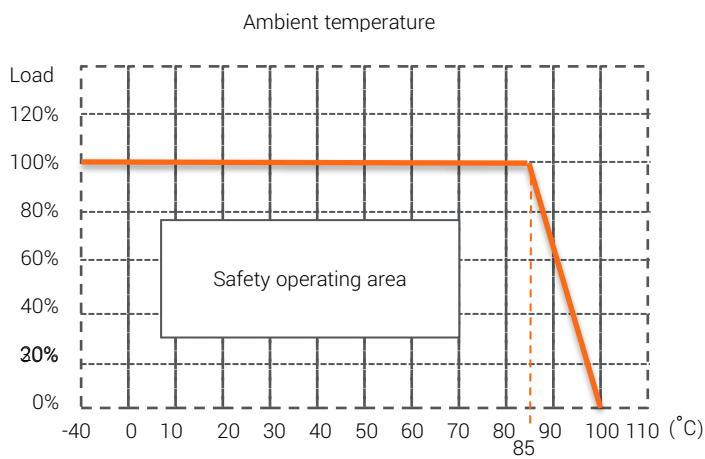
Application Circuit CTRL ON/OFF



DC/DC ON: Open

OFF = $5V \leq Vctrl \leq 6V$

Derating Curve



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.

