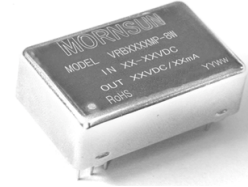


# MORNSUN

## VRB\_MP-8W Series 8W, WIDE INPUT, ISOLATED&REGULATED SINGLE OUTPUT DC-DC CONVERTER



RoHS

### FEATURES

- Wide (2:1) Input Range
- Operating Temperature: -40°C~+85°C
- 1.5KVDC Input/Output Isolation
- Metal Shielding Package
- DIP package
- No Heat Sink Required
- Industry Standard Pin out
- MTBF>1,000,000 hours
- RoHS Compliance

### Application

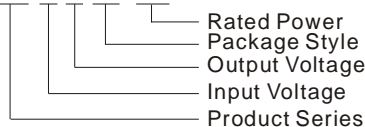
The VRB\_MP-8W Series is specially designed for applications where a wide range input voltage power supplies are isolated from the input power supply in a distributed power supply system on a circuit board.

These products apply to:

- 1) Where the voltage of the input power supply range is wide (voltage range $\geq$  2:1);
- 2) Where isolation is necessary between input and output (Isolation voltage $\leq$ 1500VDC);
- 3) Where the regulation of the output voltage and the output ripple noise are demanded.

### MODEL SELECTION

VRB4805MP-8W



### PRODUCT PROGRAM

Part Number	Input			Output			Efficiency (% Typ.)	Capacitor Load Max
	Voltage (VDC)			Voltage (VDC)	Current(A)			
	Nominal	Range	Max*		Max.	Min.		
VRB1203MP-8W	12	9-18	20	3.3	2000	200	78	3300
VRB1205MP-8W				5	1500	150	81	1600
VRB1212MP-8W				12	667	67	86	350
VRB1215MP-8W				15	533	54	84	240
VRB1224MP-8W				24	334	34	85	100
VRB2405MP-8W	24	18-36	40	5	1500	150	81	1600
VRB2412MP-8W				12	667	67	85	350
VRB2415MP-8W				15	533	54	84	240
VRB2424MP-8W				24	334	34	84	100
VRB4805MP-8W	48	36-75	80	5	1500	150	84	1600
VRB4812MP-8W				12	667	67	84	350
VRB4815MP-8W				15	533	54	84	240
VRB4824MP-8W				24	334	34	85	100

\*Input voltage above it may cause permanent damage to the device.

### COMMON SPECIFICATIONS

Item	Test conditions	Min.	Typ.	Max.	Units
Storage Humidity				95	%
Operating Temperature		-40		85	°C
Storage Temperature		-55		125	
Lead Temperature	1.5mm from case for 10 seconds			300	
Temp. Rise at Full Load			40		
MTBF		1000			K hours
CTRL(Reference point: GND)	On	3.5-12VDC or open circuit			
	Off	0-1.2VDC or short circuit Pin1 and Pin2/pin3			
Cooling		Free Air Convection			
Short Circuit Protection		Continuous, automatic recovery			
Case Material		Copper, Nickel Plated			

### ISOLATION SPECIFICATIONS

Item	Test conditions	Min.	Typ.	Max.	Units
Isolation voltage	Tested for 1 minute and 1mA max	1500			VDC
Isolation resistance	Test at 500VDC	500			MΩ
Isolation capacitance			100		pF

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