

# MP1500G - MP1510G

### 15A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER



### **Features**

- Glass Passivated Die Construction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has UL Flammability 94V-0
- Recognized File # E157705

Metal Heatsink



### **Mechanical Data**

Case: MP-15, Molded Plastic with Heatsink

Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Marked on Body

Weight: 5.4 grams (approx.)

Mounting Position: Through Hole for #6 Screw

Mounting Torque: 0.8 N.m Max.

Marking: Type Number

Lead Free: For RoHS / Lead Free Version. Add "-LF" Suffix to Part Number, See Page 4

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MP 1500G	MP 1501G	MP 1502G	MP 1504G	MP 1506G	MP 1508G	MP 1510G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>C</sub> = 40°C	lo				15				Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM				220				Α
Forward Voltage per leg @I <sub>F</sub> = 7.5A	VFM				1.2				V
	IRM				10 1.0				μA mA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t				200				A <sup>2</sup> s
Typical Junction Capacitance (Note 2)	Сл				70				pF
Thermal Resistance Junction to Ambient (Note 3) Thermal Resistance Junction to Case (Note 1)	R JA R JC				22 6.0				°C/W
RMS Isolation Voltage Terminals to Case, t = 1min	Viso				1500				V
Operating and Storage Temperature Range	TJ, TSTG				55 to +15	50			°C

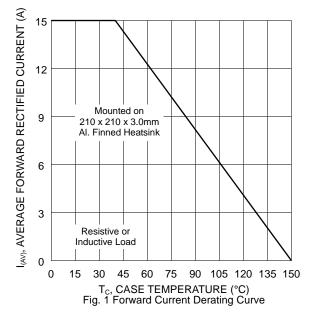
Note: 1. Mounted on 210 x 210 x 3.0mm thick Al. heatsink.

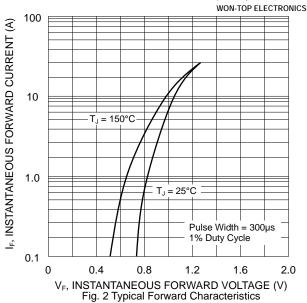
Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
 Mounted on PCB with 12 x 12mm copper pads and measured at lead length 9.5mm from case.

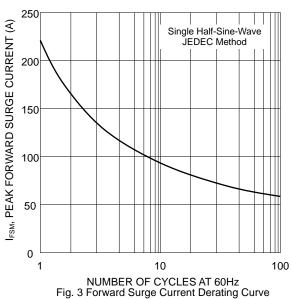
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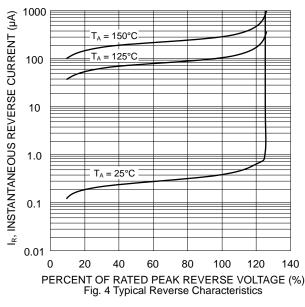
# MP1500G - MP1510G

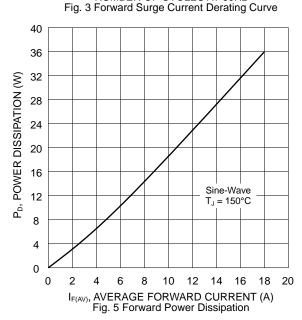


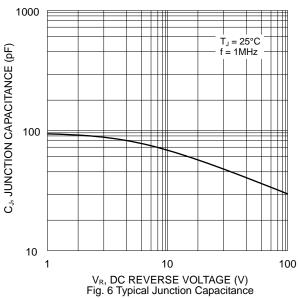






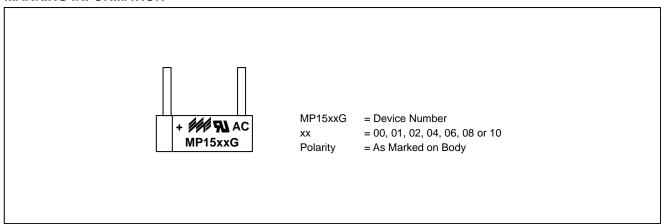








# **MARKING INFORMATION**



### **PACKAGING INFORMATION**

### **BULK**

Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
237 x 240 x 52	200	500 x 255 x 275	2,000	14.0

Note: 1. Paper box, white or brown color.



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
MP1500G	Square Bridge	200 Units/Box
MP1501G	Square Bridge	200 Units/Box
MP1502G	Square Bridge	200 Units/Box
MP1504G	Square Bridge	200 Units/Box
MP1506G	Square Bridge	200 Units/Box
MP1508G	Square Bridge	200 Units/Box
MP1510G	Square Bridge	200 Units/Box

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, MP1500G-LF.

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**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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