MP501M Thru MP5010M

High Current Glass Passivated Molding Single-Phase Bridge Rectifier

Reverse Voltage 100 to 1000V Forward Current 50.0 A

FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- High current capacity with small package
- Glass passivated chip junctions
- Superior thermal conductivity
- High IFSM



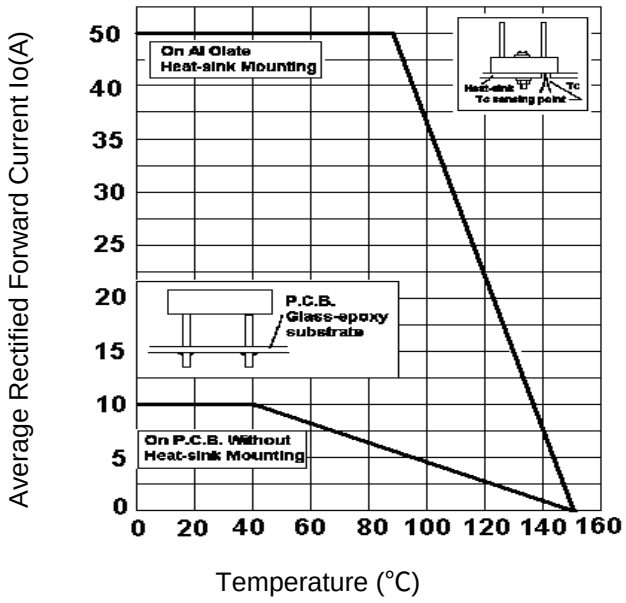
1. Maximum & Thermal Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

Item	Symbol	MP501M	MP502M	MP504M	MP506M	MP508M	MP5010M	Unit
Maximum repetitive voltage	VRM	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	800	1000	V
Maximum DC reverse current TA=25℃	IR	5						μA
at rated DC blocking voltage TA=125℃		500						
Average recified forward current Tc=100℃	Io	50						A
60Hz sinewave,R-load with heatsink Ta=38℃		10						
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	450						A
Rating for Fusing (t<8.3ms)	I^2t	840						A^2sec
Dielectric strength Terminals to case, AC 1 minute Current 1mA	Vdia	2.5						KV
Maximum instantaneous forward voltage at 25A	VF	1.05						V
Operating junction temperature	Tj	-55~150						℃
Storage temperature	Tstg	-55~150						℃
Mounting torque	Tor	Rating Torque : 1.2（Suggests 0.6~1.0）						N.m

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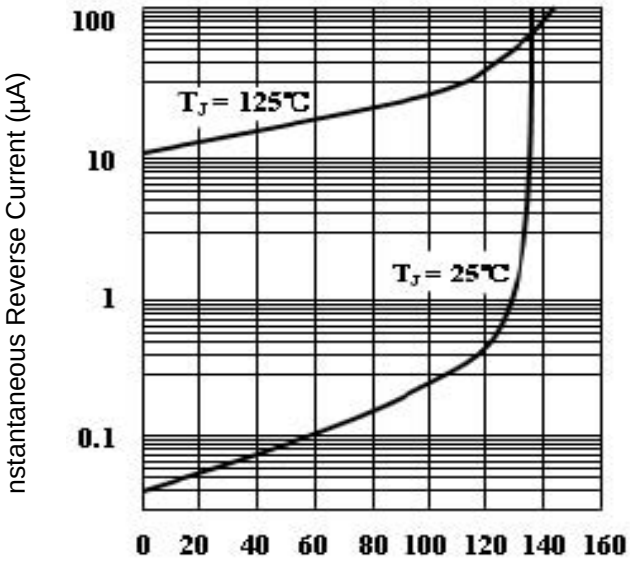
2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 Derating Curve



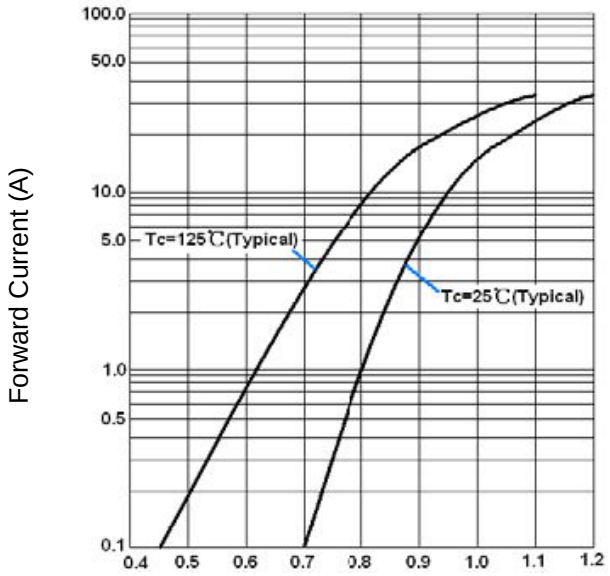
Temperature (°C)

Fig.2 Typical Reverse Characteristics



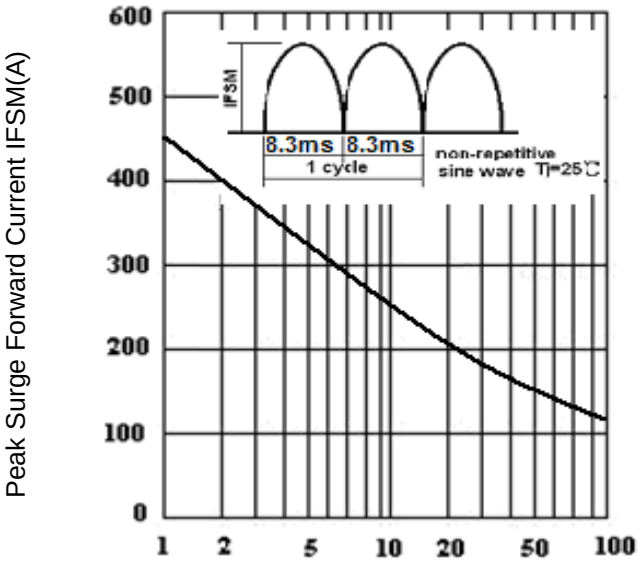
Percent of Rated Peak Reverse Voltage%

Fig.3 Forward Voltage



Forward Voltage VF

Fig.4 Peak Surge Forward Capability



Number of Cycles

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3. Marking Identification



Note：

生产日期码包含4位数字，例如 “1013”，前两个数字“10” 表示为2010年，另外二个数字“13” 是指第13周，即表示该产品为2010年13周生产。

型号： **MP** **50** **10** **M**

- M → Molding Epoxy
- 10 → bridge reverse voltage=1000V
- 50 → average rectified forward Current=50A
- MP → mean：MP series bridge

4. Dimension

