

Silicon Bridge Rectifiers

MP15005--MP1510

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 300 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208



Lead-free

Maximum Ratings (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	MP15005	MP1501	MP1502	MP1504	MP1506	MP1508	MP1510	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T _A =25°C	I _{F(AV)}	15							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	300							A

Thermal Characteristics

Characteristic	Symbol	MP15005	MP1501	MP1502	MP1504	MP1506	MP1508	MP1510	UNITS
Operating junction temperature range	T _J	- 55 ---- + 125							°C
Storage temperature range	T _{STG}	- 55 ---- + 150							°C

Electrical Characteristics (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	MP15005	MP1501	MP1502	MP1504	MP1506	MP1508	MP1510	UNITS
Maximum instantaneous forward voltage @7.5A	V _F	1.1							V
Maximum reverse current @T _A =25 °C at rated DC blocking voltage @T _A =100°C	I _R	10							μ A
		1.0							mA



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PACKAGE OUTLINE DIMENSIONS

MP		
Dim	Min	Max
A	28.35	28.75
B	28.35	28.75
C	7.55	8.05
E	0.8 Typical	
F	11.50min	
I	6.25	6.55
K1	15.80	16.40
K2	15.80	16.40
K3	14.00	14.60
K4	17.60	18.20
P	Ø5.3Typical	
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
MP15005--MP1510	MP	50 Units/Box



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FIG.1 – PEAK FORWARD SURGE CURRENT

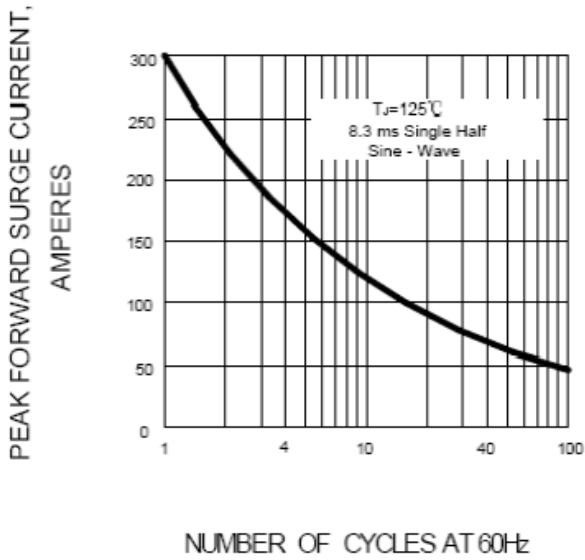


FIG.2 -- FORWARD DERATING CURVE

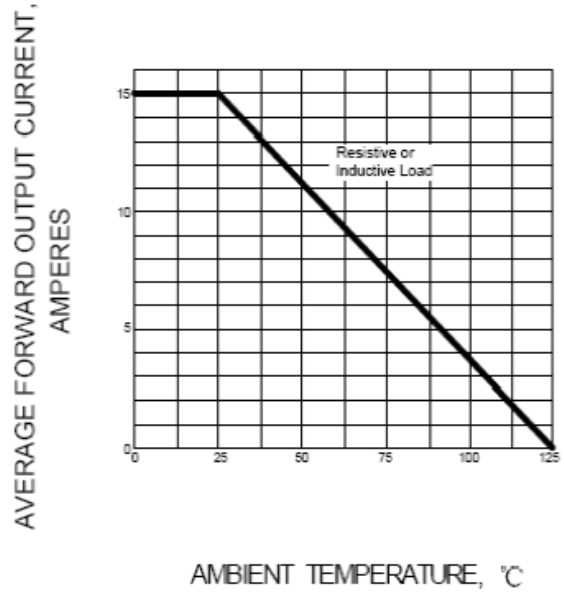


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

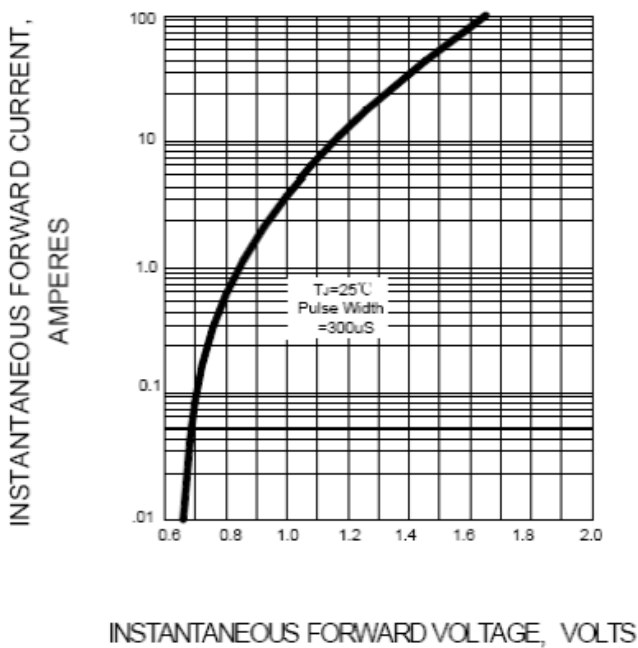


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

