

MB1F THRU MB10F

MINI SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS



FEATURES

- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded plastic technique
- * High surge current capability
- * Polarity: marked on body
- * Mounting position: Any
- * Lead Free Finish/RoHS Compliant

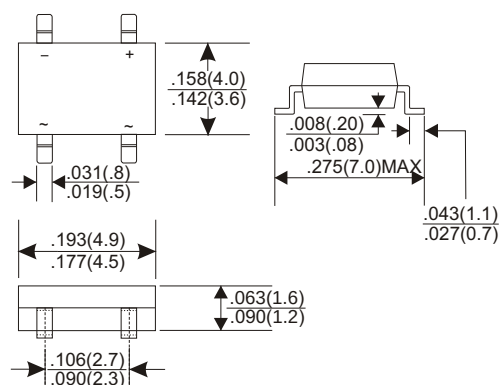
VOLTAGE RANGE

100 to 1000 Volts

CURRENT

0.8 Ampere

SMD/MB-F



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbo	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current On glass-epoxy On aluminum substrate	$I_{F(AV)}$	0.6 0.8						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30						A
Maximum Instantaneous Forward Voltage (Note 1) @ 0.4A	V_F	1.0						V
Rating for fusing (t<8.3ms)	I^2T	3.74						A ² sec
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25\text{ }^{\circ}\text{C}$ $T_A=125\text{ }^{\circ}\text{C}$	I_R	10 150						uA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	25 80						°C/W
Operating Temperature Range	T_J	- 55 to + 150						°C
Storage Temperature Range	T_{STG}	- 55 to + 150						°C

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Mounted on P.C.B. with 5mm x 5mm Copper Pads

RATING AND CHARACTERISTIC CURVES (MB1F THRU MB10F)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

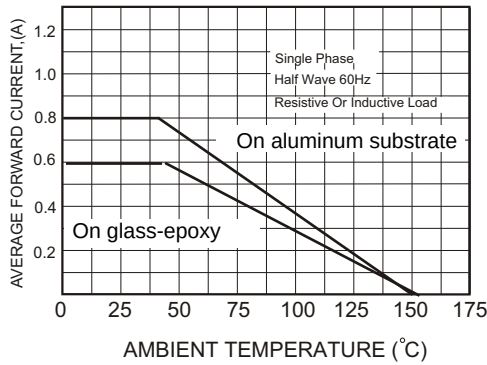


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

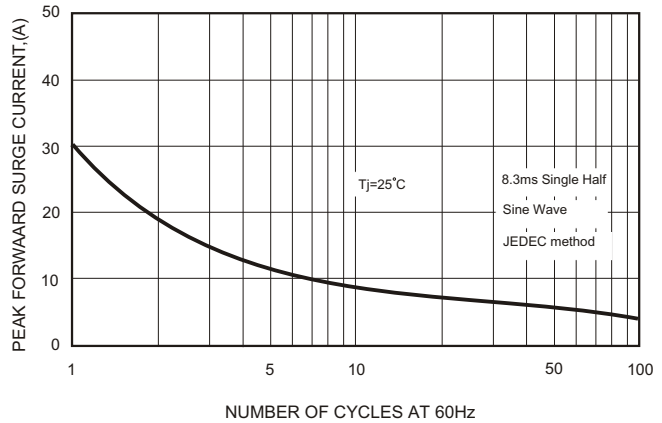


FIG.3-TYPICAL FORWARD CHARACTERISTICS

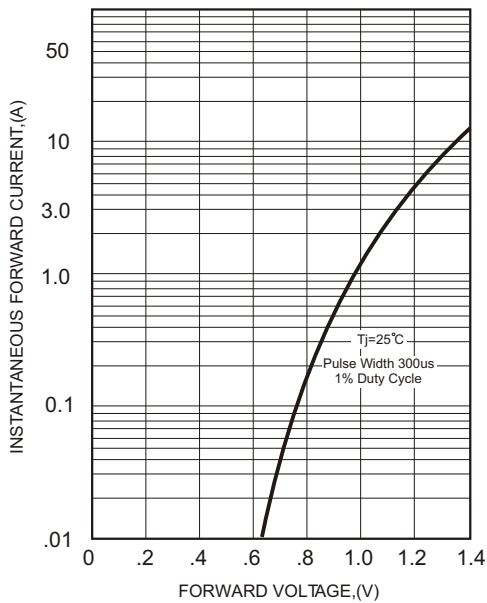


FIG.4-TYPICAL REVERSE CHARACTERISTICS

