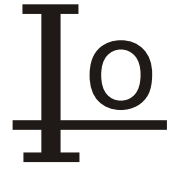


# MB1F THRU MB10F

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

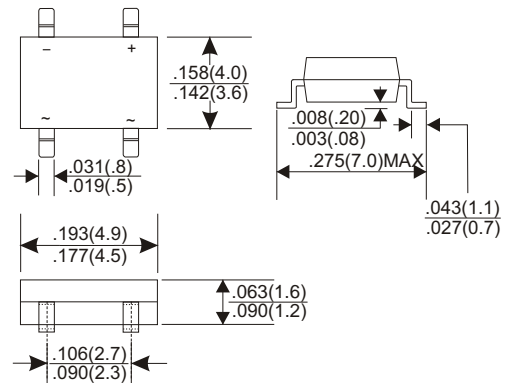
## VOLTAGE RANGE

100 to 1000 Volts

## CURRENT

1.0 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	$V_{RMS}$	700	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	$I_{F(AV)}$	0.8 1.0						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) @ 0.5A	$V_F$	0.95						V
Rating for fusing (t<8.3ms)	$I^2T$	3.74						A <sup>2</sup> sec
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25\text{ }^\circ\text{C}$ 10 $T_A=125\text{ }^\circ\text{C}$ 150						$\mu\text{A}$
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	25 80						$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	- 55 to + 150						$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150						$^\circ\text{C}$

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

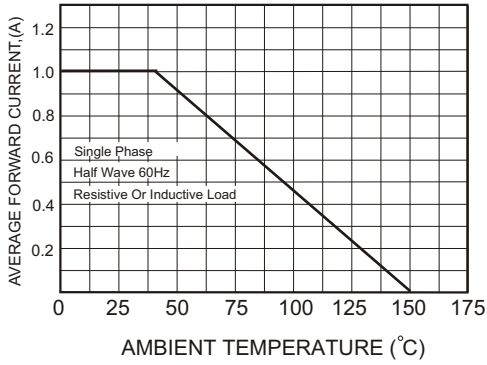


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

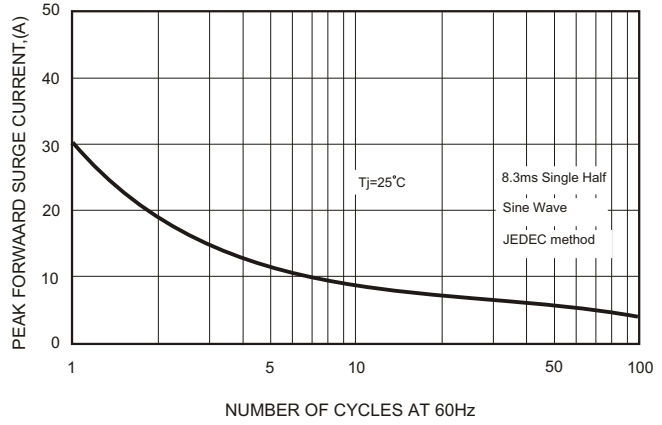


FIG.3-TYPICAL FORWARD CHARACTERISTICS

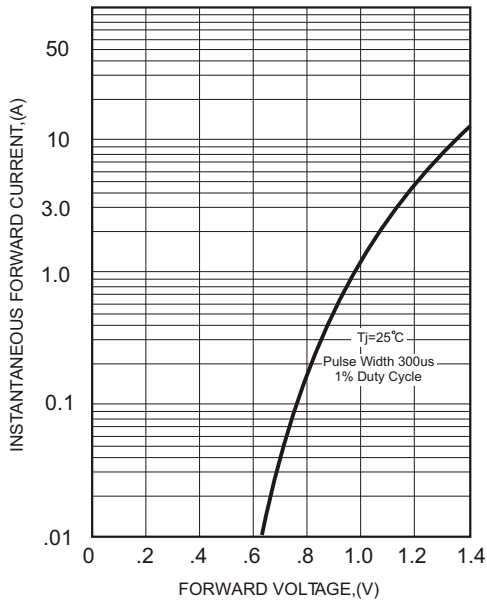


FIG.4-TYPICAL REVERSE CHARACTERISTICS

