

MB2F-MB10F

Single Phase 1.0 AMP Glass Passivated Bridge Rectifiers



FEATURES

- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed : 260°C / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs., (2.3 kg) tension



MECHANICAL DATA

- Case : Molded Plastic
- Epoxy : Device has UL flammability classification 94V-0
- Mounting Position : Any
- Marking : Type Number

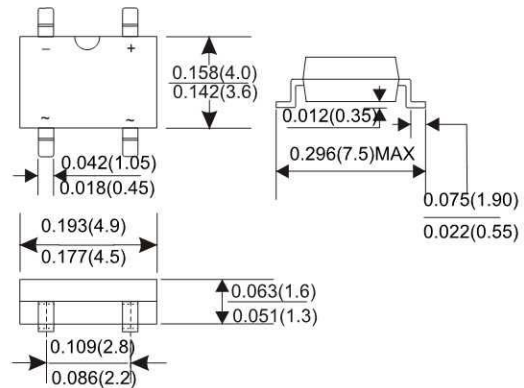
VOLTAGE RANGE

200 to 1000 Volts

CURRENT

1.0Ampere

MBF



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200V	400V	600V	800V	1000V	V
RMS Reverse Voltage	$V_R(RMS)$	140V	280V	420V	560V	700V	V
Average Rectified Output Current -On glass-epoxy P.C.B. -On aluminum substrate	I_O	0.5 0.8					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	10					A ² s
Forward Voltage per element @ $I_F = 0.4A$	V_{FM}	0.95					V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_{RM}	10 150					μA
Typical Junction Capacitance per leg (Note 2)	C_J	25					pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25					$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150					$^\circ C$

Note: 1. On aluminum substrate P.C.B. with an area of 0.8×0.8"(20×20mm) mounted on 0.05×0.05"(1.3×1.3mm) solder pad.
2. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

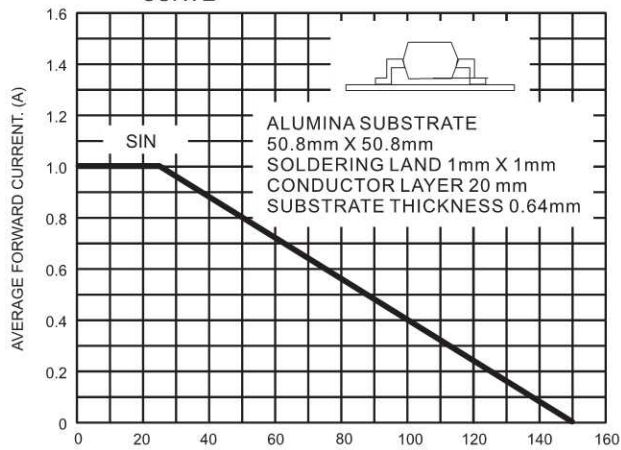


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

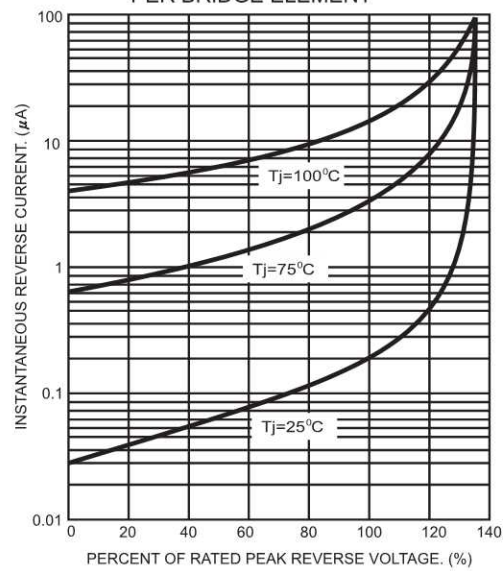


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

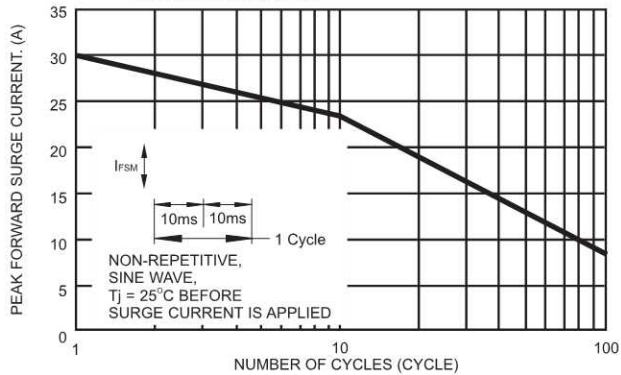


FIG.4- TYPICAL JUNCTION CAPACITANCE

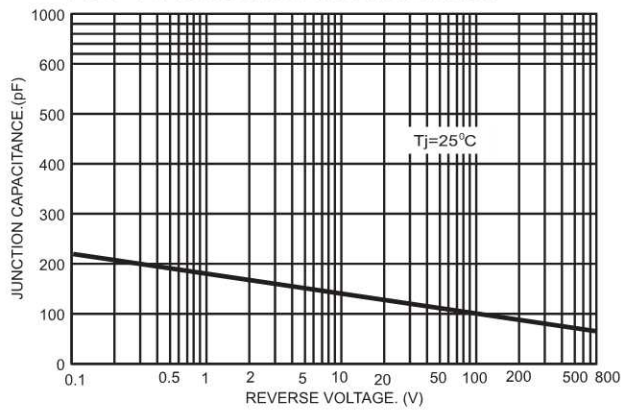


FIG.5- TYPICAL FORWARD CHARACTERISTICS

