



SEMICONDUCTOR

# MB2F-MB10F

Single Phase 0.8 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

## VOLTAGE RANGE

200 to 1000 Volts

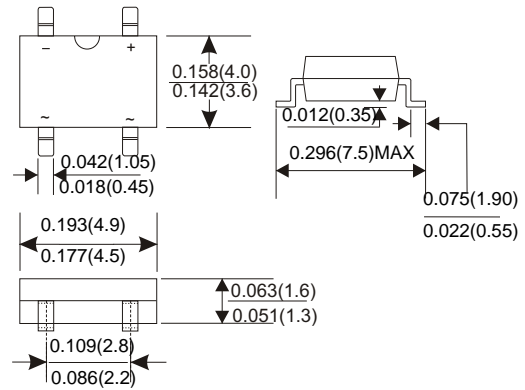
## CURRENT

0.8Ampere

MBF

## MECHANICAL DATA

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



## 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	$V_{RRM}$	200V	400V	600V	800V	1000V	V	
Working Peak Reverse Voltage	$V_{RWM}$							
DC Blocking Voltage	$V_R$							
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	$I_O$	0.8						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 <sup>2</sup> s
Forward Voltage per element @ $I_F = 0.4A$	$V_{FM}$	0.95						V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^\circ C$ @ $T_A = 125^\circ C$	$I_{RM}$	10 150						$\mu A$
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.

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## RATING AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

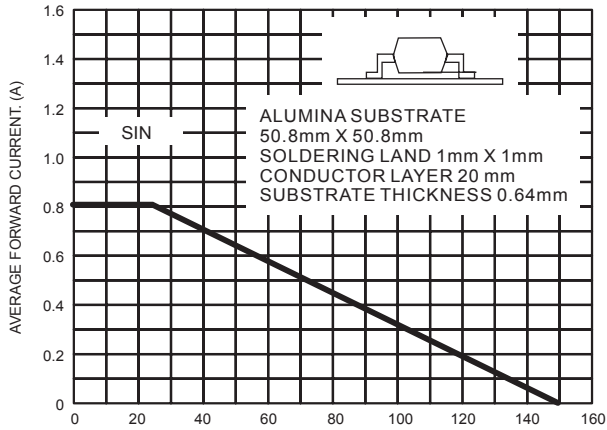


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

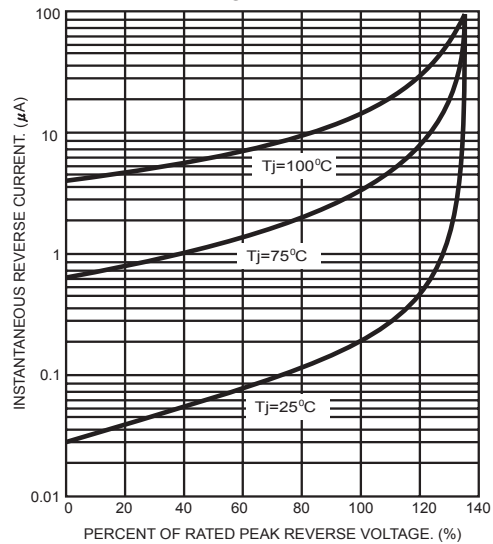


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

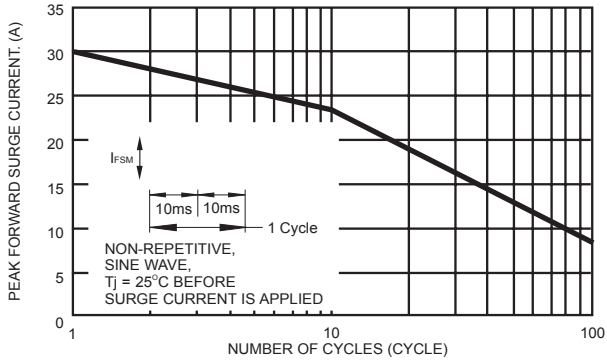


FIG.4- TYPICAL JUNCTION CAPACITANCE

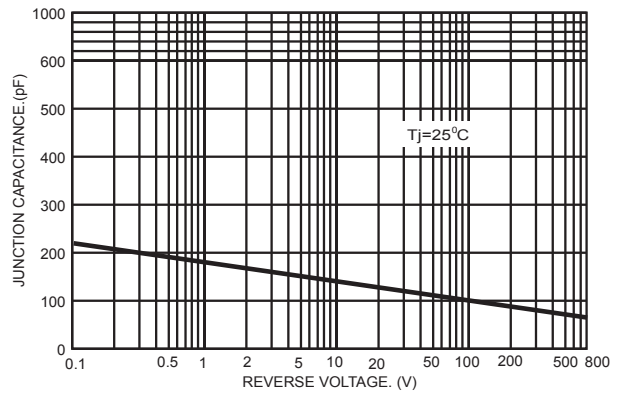


FIG.5- TYPICAL FORWARD CHARACTERISTICS

