

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

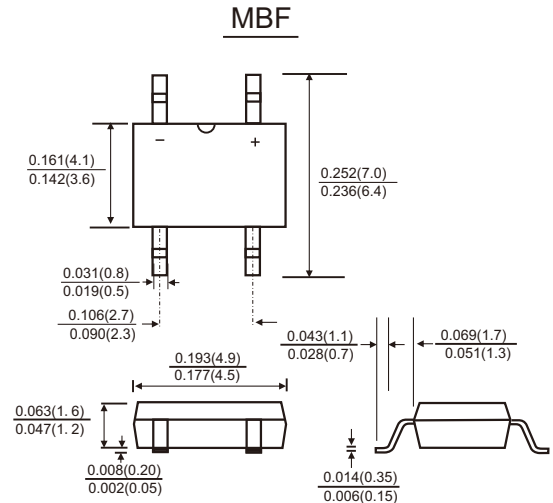
Reverse Voltage: 100 to 1000 Volts
Forward Current: 1.0 Amps

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: MBF molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current on glass-epoxy P.C.B.(NOTE1) on aluminum substrate(NOTE2)	$I_{(AV)}$	1.0						Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30						Amps
Rating for fusing ($t < 8.3ms$)	I^2t	3.735						A ² s
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.1						Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ C$	5						μA
	$T_A=125^\circ C$	500						
Typical junction capacitance(Note 2)	C_J	13						pF
Typical thermal resistance (Note 1)	$R_{\theta JA}$	100						$^\circ C/W$
	$R_{\theta JL}$	36						
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150						$^\circ C$

Note: 1. On glass-epoxy P.C.B mounted on 0.05*0.05"(1.3*1.3mm)pads.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES MB1F THRU MB10F

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

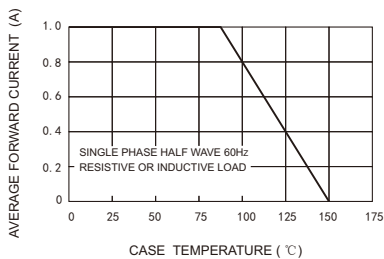


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

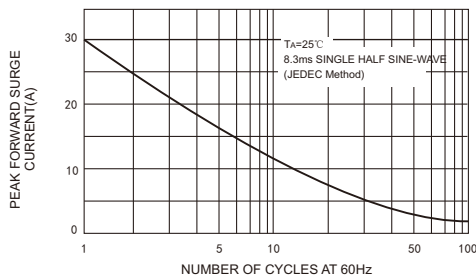


FIG3-TYPICAL JUNCTION CAPACITANCE

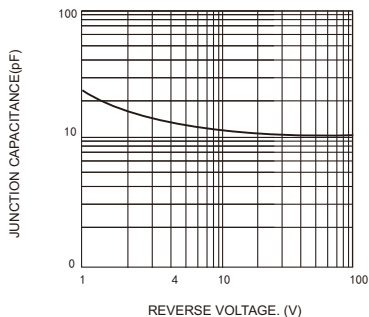


FIG4-TYPICAL FORWARD CHARACTERISTICS

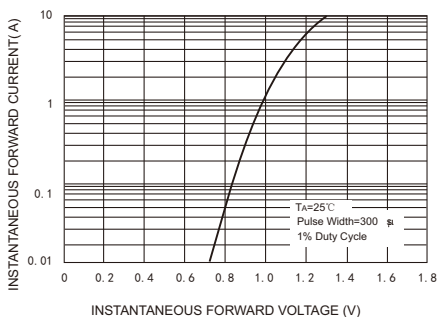


FIG.5-TYPICAL REVERSE CHARACTERISTICS

