



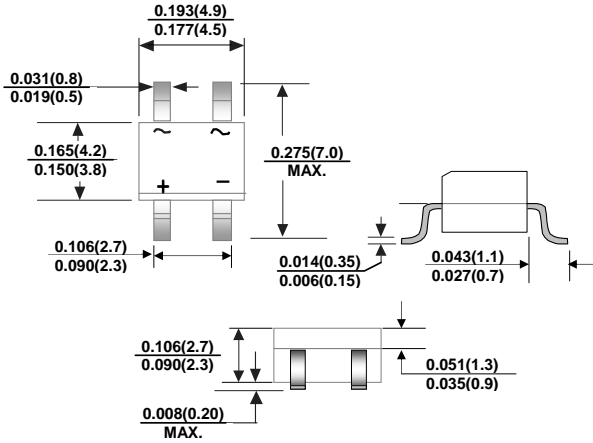
MB1S THRU MB10S

Single-Phase Surface Mount Glass Passivated Bridge Rectifiers

Reverse Voltage -100V to 1000 Volts Forward Current - 0.5 / 0.8 Amperes

MBS

FEATURES



- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ Small size, simple installation
- ◆ High surge current capability
- ◆ High temperature soldering guaranteed: 260°C / 10 seconds
- ◆ Pb free product : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: Molded plastic

Terminals: Solderable per MIL-STD-750 · Method 2026

Lead: solder plated

Polarity: As marked

Mounting Position: Any

Weight: 0.008 ounce, 0.22 grams

Dimensions in inches and (millimeters)

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%.

PARAMETER	SYMBOLS	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
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
Minimum DC Breakdown Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (see Fig :1) on glass-epoxy P.C.B. (1) on aluminum substrate (2)	$I_{F(AV)}$	0.5 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 @ 0.4A	V_F	1.0						V
Maximum DC Reverse Current rated DC blocking voltage per leg @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	5.0 100						μA
Typical junction capacitance per leg	C_J	15						pF
Typical Thermal Resistance pre leg (note 3)	$R_{\theta JA}$	75.0						$^\circ\text{C/W}$
Operating Temperature and Storage Temperature Range	T_J , T_{STG}	-55 to +150						$^\circ\text{C}$

Note: 1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads

2. On aluminum substrate P.C.B. with on area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad

3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

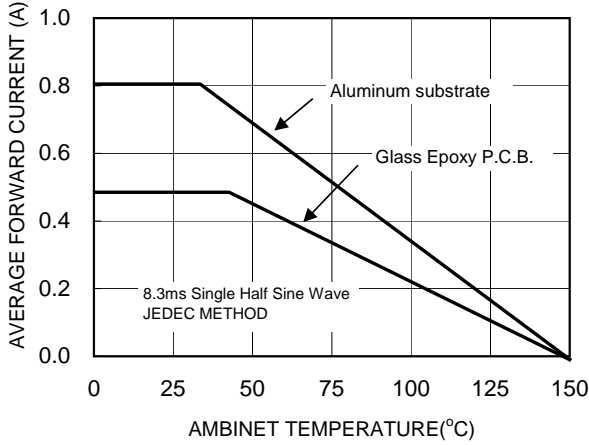


FIG. 2-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT CHARACTERISTICS

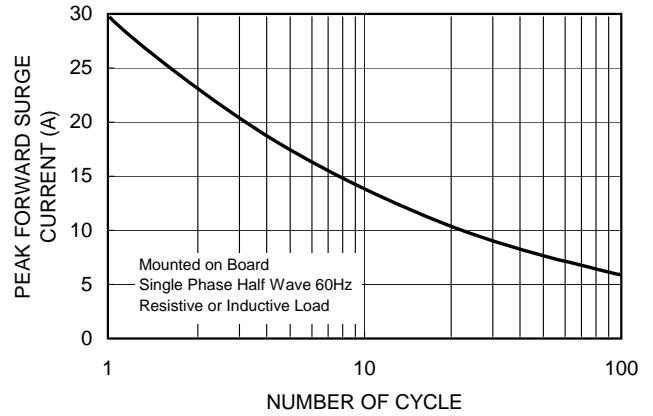


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

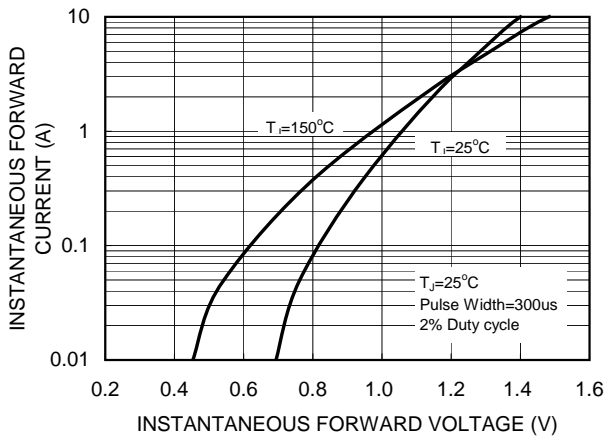


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

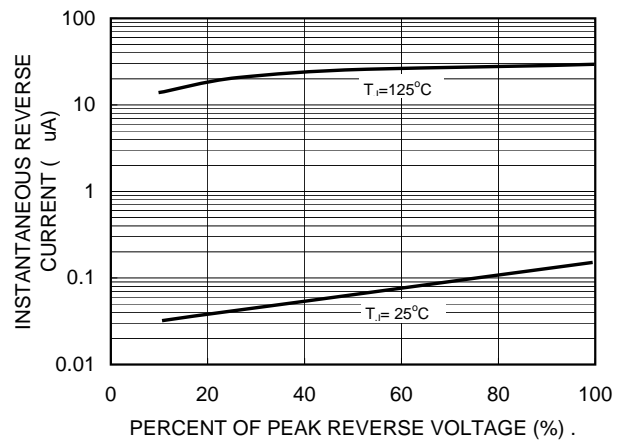


FIG 5.-TYPICAL JUNCTION CAPACITANCE

