

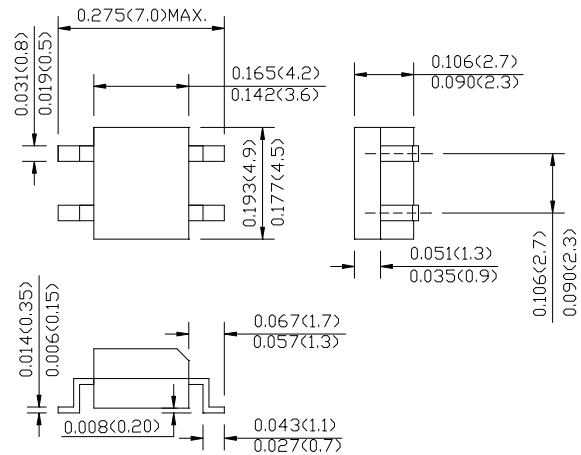
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead in plated copper

MECHANICAL DATA

- Polarity: Symbol molded on body
- Weight: 0.0044 ounces, 0.125 grams
- Mounting position: Any

MD-1S/MB-S



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, derate current by 20%.

	Symbols	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	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 (Note1) @ $T_A = 40^\circ C$	$I_{(AV)}$	0.8						Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	30						Amp
Maximum DC Forward Voltage drop per element at 0.4A DC	V_F	1.0						Volts
Maximum DC Reverse Current at rated @ $T_A = 25^\circ C$ DC Blocking Voltage Per Element @ $T_A = 125^\circ C$	I_R	5 500						μ Amp
Typical Junction Capacitance per element (Note2)	C_J	15						pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	75						$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150						$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150						$^\circ C$

NOTES:

1. Mounted on P.C. Board.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal Resistance Junction to Ambient.

RATINGS AND CHARACTERISTIC CURVES (MB1S THRU MB10S)

FIG. 1 - FORWARD CURRENT DERATING CURVE

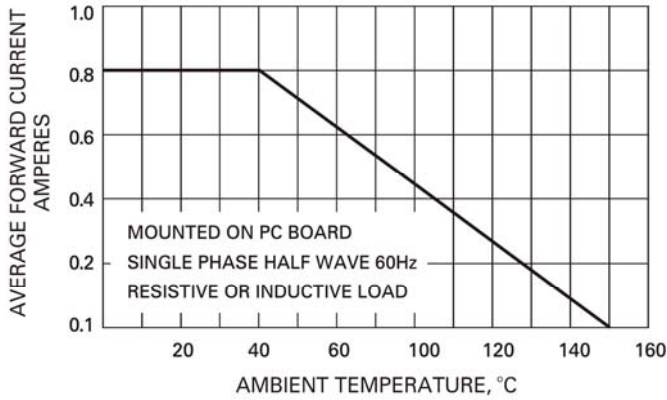


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

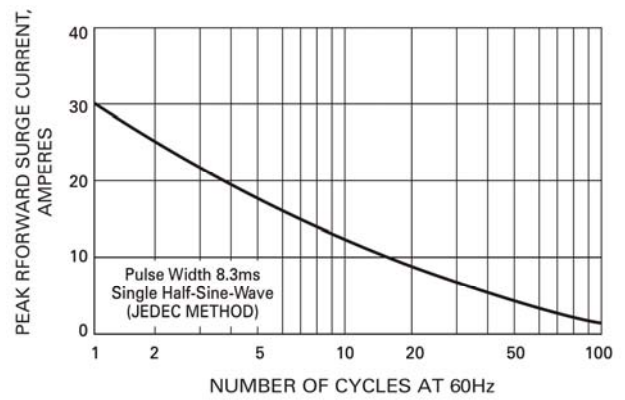


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

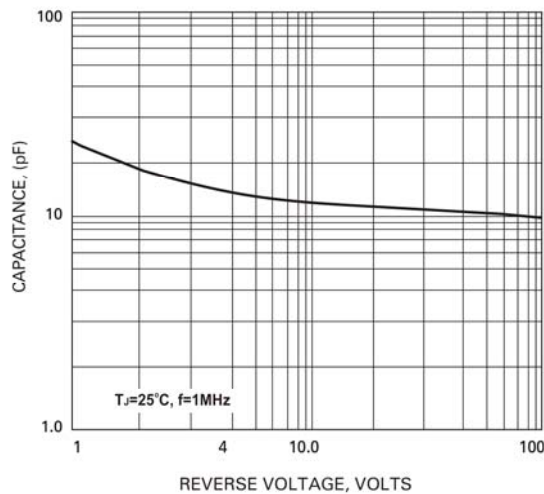


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

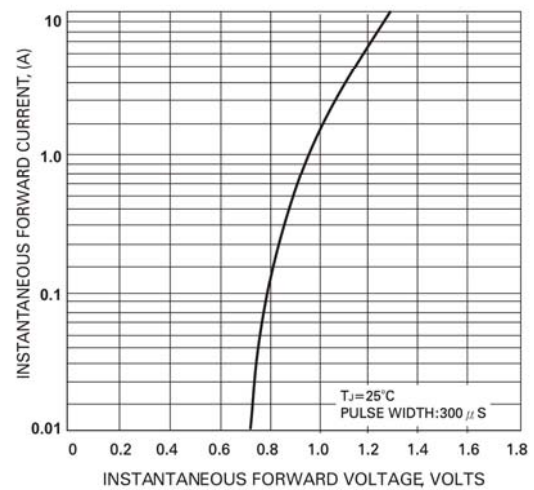


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

