

MB1S THRU MB10S



SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

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

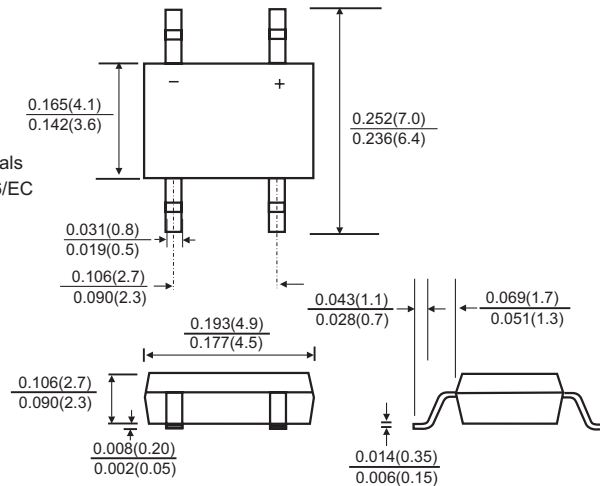
FEATURES

- 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 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: MBS molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any
- Weight: 0.0044ounce, 0.125 gram

MBS



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	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	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
Maximum Instantaneous Forward Voltage at 1.0 A DC	V _F	1.1						Volts
Maximum DC Reverse Current at rated DC blocking voltage	T _A =25° C	5						μ A
	T _A =125° C	100						
Typical junction capacitance(Note2)	C _J	15						pF
Typical thermal resistance (Note1)	R _{θ JA}	75						°C/W
	R _{θ JC}	30						
Operating junction and storage temperature range	T _J T _{STG}	-55 to +150						°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 MB1S THRU MB10S

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

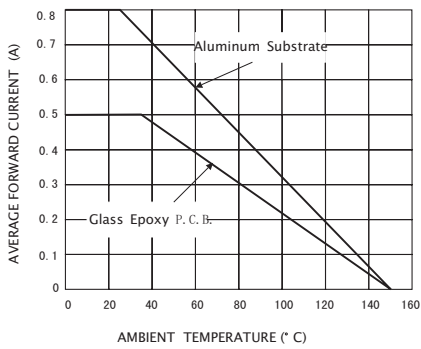


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

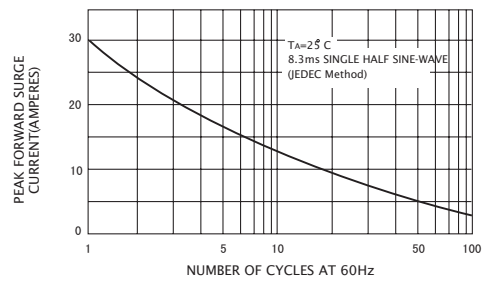


FIG3-TYPICAL JUNCTION CAPACITANCE

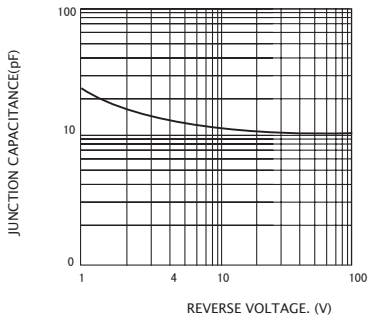


FIG4-TYPICAL FORWARD CHARACTERISTICS

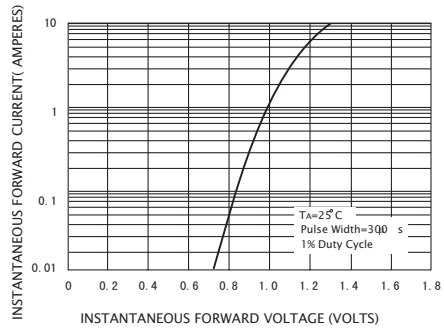


FIG.5-TYPICAL REVERSE CHARACTERISTICS

