



SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

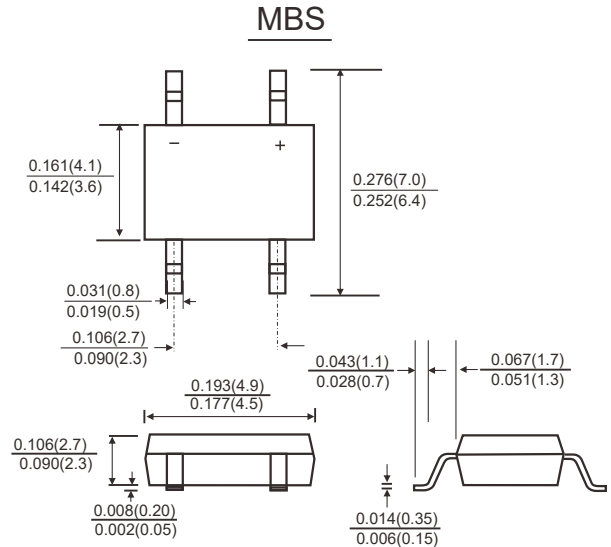
Reverse Voltage: 100 to 1000 Volts
Forward Current: 0.5 Amps

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 2015/863/EU

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



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	$I(AV)$	0.5						Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25						Amps
Maximum Instantaneous Forward Voltage at 0.5 A DC	V_F	1.1						Volts
Rating for fusing ($t < 8.3ms$)	I^2t	2.593						A ² s
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^{\circ}C$	5						μA
	$T_A=125^{\circ}C$	100						
Typical junction capacitance(Note2)	C_J	15						pF
Typical thermal resistance (Note1)	$R_{\theta JA}$	96						°C/W
	$R_{\theta JC}$	40						
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

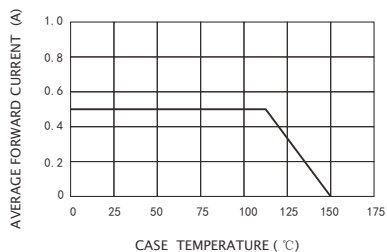


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

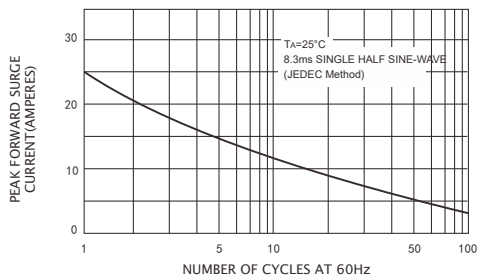


FIG3-TYPICAL JUNCTION CAPACITANCE

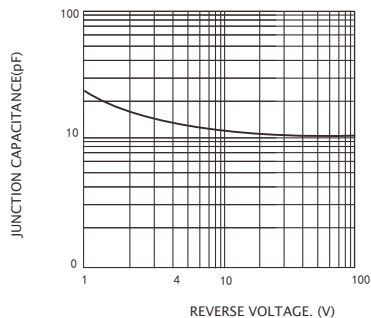


FIG4-TYPICAL FORWARD CHARACTERISTICS

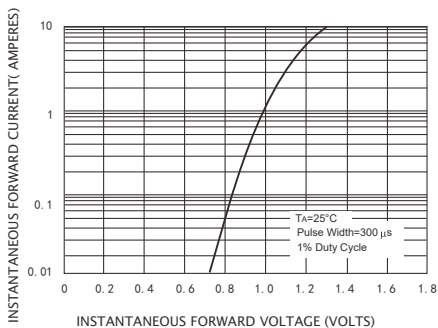


FIG.5-TYPICAL REVERSE CHARACTERISTICS

