

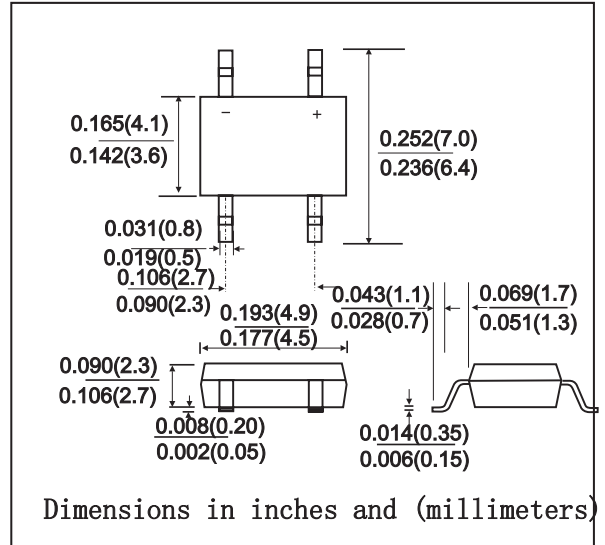
MBS SILICON BRIDGE RECTIFIERV
REVERSE VOLTAGE: 100 --- 1000V CURRENT: 0.5A

FEATURES

- Ideal for printed circuit board
 - Plastic package has Underwriters laboratory Flammability classification 94V-0
 - Glass passivated chip junction
 - Rating to 1000v PRV
 - High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/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 CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter		MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward output current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	0.5 ¹⁾ 0.8 ²⁾							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	35.0							A
Maximum instantaneous forward voltage @ 0.4 A	V_F	1.0							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 0.5							μA mA
Typical junction capacitance per leg (NOTE 3)	C_J	13							pF
Typical thermal resistance per leg (NOTE 1) (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	85 20							$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55 ---- + 150							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ---- + 150							$^\circ\text{C}$

NOTES: (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads
(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

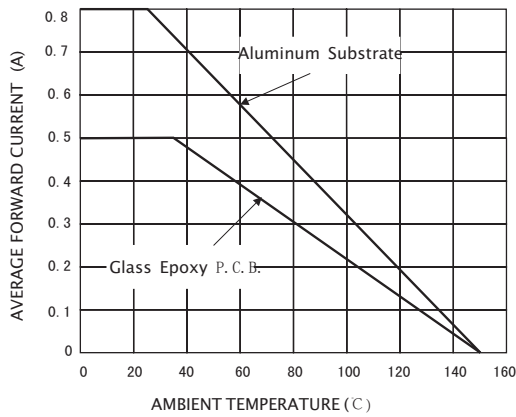


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

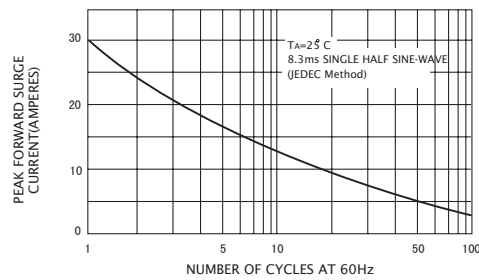


FIG3-TYPICAL JUNCTION CAPACITANCE

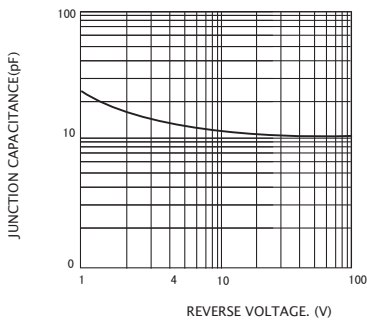


FIG4-TYPICAL FORWARD CHARACTERISTICS

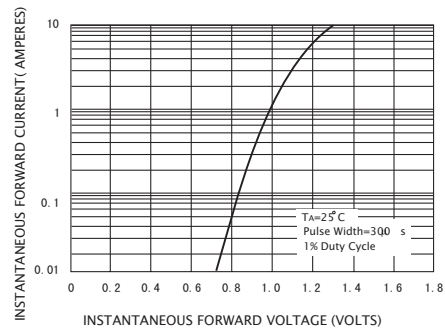


FIG.5-TYPICAL REVERSE CHARACTERISTICS

