HFZT

MB05S-------MB10S

BRIDGE RECTIFIER

REVERSE VOLTAGE : 100 --- 1000 V
FORWARD CURRENT: 0.5 A

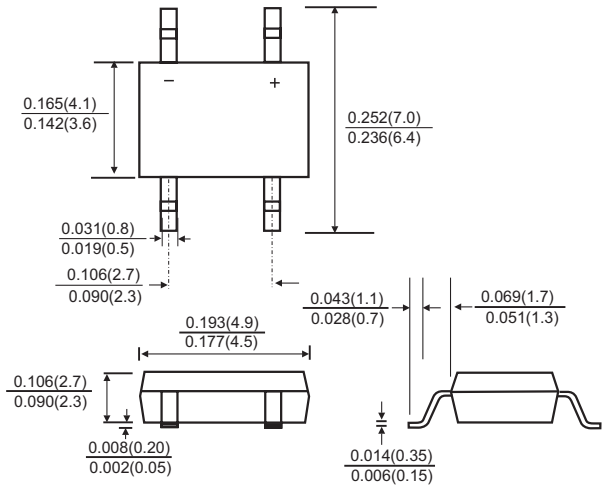
FEATURES

- Ideal for pined circuit board
- Plastic package has Underwriters laboratory Flammability classification 94V-0
- Glass passivated chip junction
- Rating to 1000v PRV
- High temperature soldering guaranteed:260℃/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

MBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.
For capacitive load,derate by 20%.

		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 forw ard output current @T_A=25℃	$I_{F(AV)}$	0.5[1)] 0.8[2)]							A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load	I_{FSM}	35.0							A
Maximum instantaneous forw ard voltage @ 0.4 A	V_F	1.0							V
Maximum reverse current @T_A=25℃	I_R	5.0							μA
at rated DC blocking voltage @T_A=100℃		0.5							mA
Typical junction capacitance per leg (NOTE 3)	C_J	13							pF
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JA}$	85							℃/W
(NOTE 2)	$R_{\theta JL}$	20							
Operating junction temperature range	T_J	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

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-TYPRCAL FORWARD CURRENT DERATING CURVE

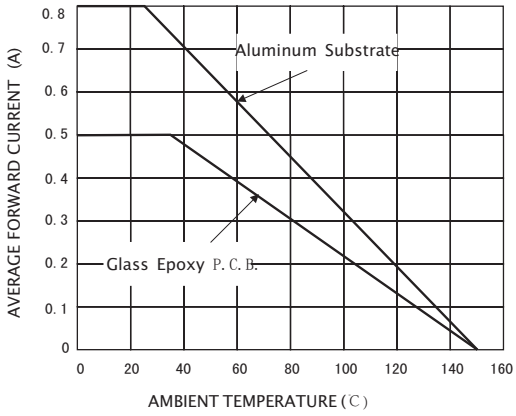


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

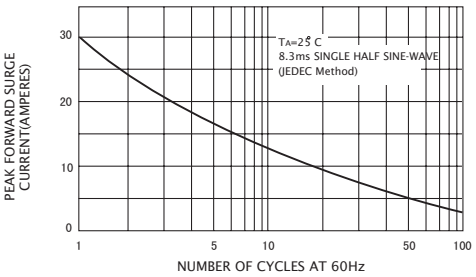


FIG3-TYPICAL JUNCTION CAPACITANCE

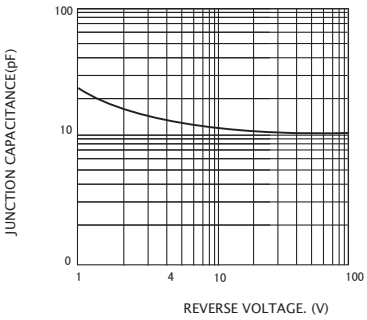


FIG4-TYPICAL FORWARD CHARACTERISTICS

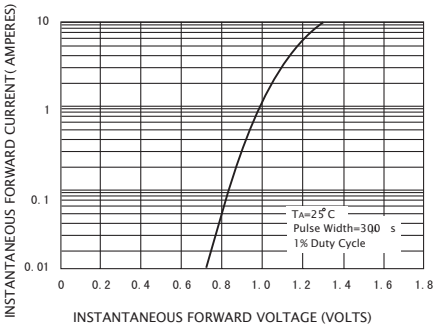


FIG.5-TYPICAL REVERSE CHARACTERISTICS