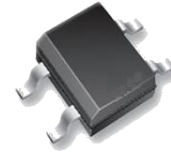


**VOLTAGE RANGE: 200 - 1000V**  
**CURRENT: 0.5A**

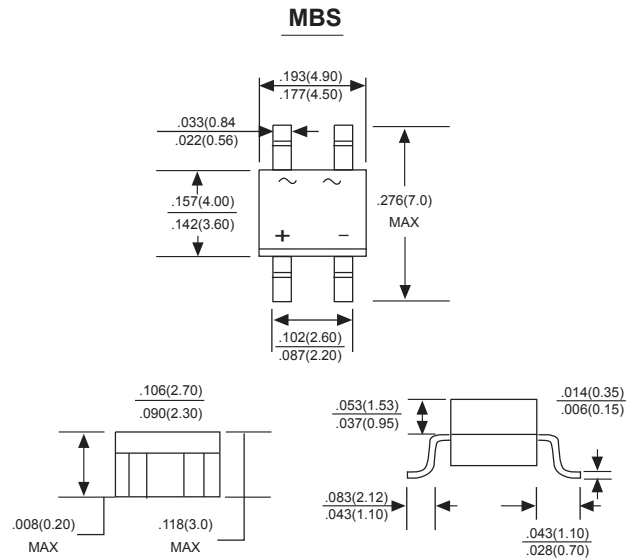


### Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability

### Mechanical Data

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Mounting Position: Any
- Weight: 0.008 ounce, 0.22 grams



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

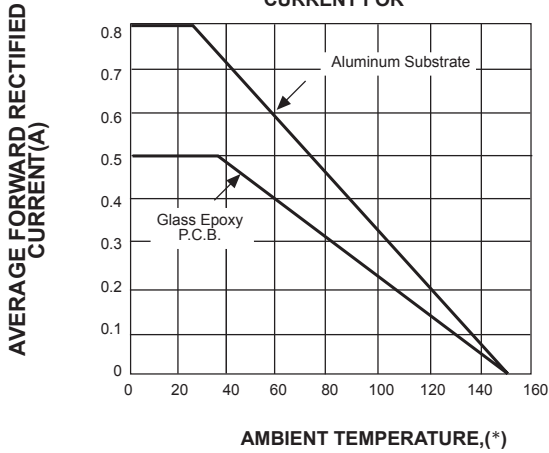
Characteristic	Symbol	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward rectified current at $T_A=30^\circ\text{C}$ On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$	0.5					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	35					A
Maximum instantaneous forward voltage drop per leg at 0.4A	$V_F$	1.0					Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	5.0 100					$\mu\text{A}$ $\mu\text{A}$
Typical junction capacitance per leg (Note 3)	$C_J$	15					pF
Typical thermal resistance per leg	$R_{\theta JA}$	75					K/W
Operating temperature range	$T_J$	-55 to +150					$^\circ\text{C}$
storage temperature range	$T_{STG}$	-55 to +150					$^\circ\text{C}$

NOTES: 1. On glass epoxy P.C.B. mounted on 0.05x0.05" (1.3x1.3mm) pads  
 2. On aluminum substrate P.C.B. with on area of 0.8"x0.8" (20x20mm) mounted on 0.05x0.05" (1.3x1.3mm) solder pad  
 3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

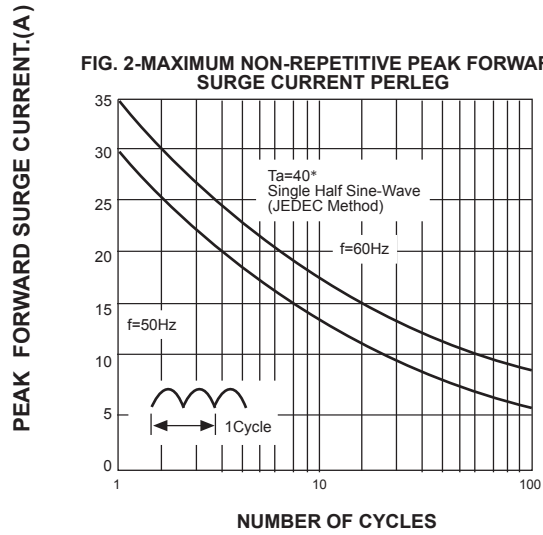


**RATINGS AND CHARACTERISTIC CURVES MBS SERIES**

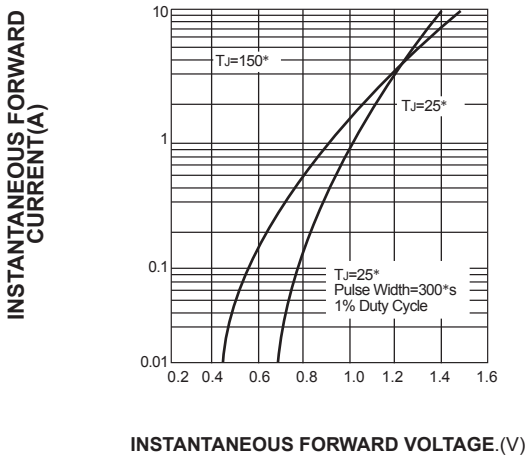
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR**



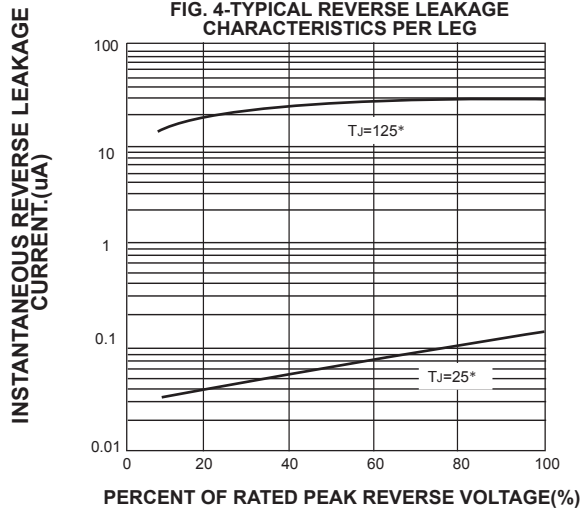
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG**

