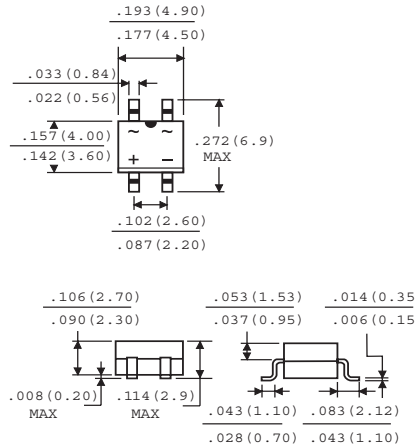




### MBS

### Features

- ✧ UL Recognized File # E-96005
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:  
260 °C / 10 seconds at 5 lbs., (2.3 kg )  
tension
- ✧ Small size, simple installation
- ✧ Leads solderable per MIL-STD-202  
Method 208



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	Symbol	MBS2	MBS4	MBS6	MBS8	MBS10	Units
Maximum Recurrent 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 On glass-epoxy P.C.B. On aluminum substrate	$I_{(AV)}$			0.5 0.8			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$			35			A
Maximum Instantaneous Forward Voltage @ 0.4A	$V_F$			1.0			V
Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$	$I_R$			5.0 100			$\mu\text{A}$ $\mu\text{A}$
Typical Junction Capacitance Per Leg	$C_j$			13			pF
Typical Thermal Resistance Per Leg	$R_{\theta JA}$			85			$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$			-55 to +150			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$			-55 to +150			$^\circ\text{C}$

Note: 1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0 Volts D.C.

## RATINGS AND CHARACTERISTIC CURVES (MBS2 THRU MBS10 )

FIG.1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

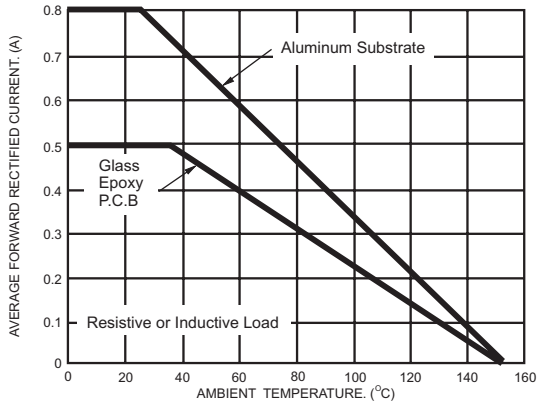


FIG.2- TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

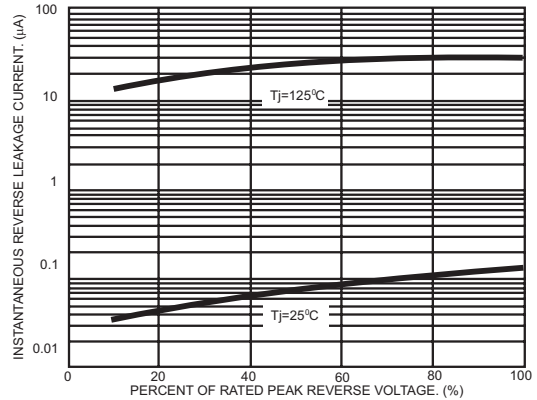


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

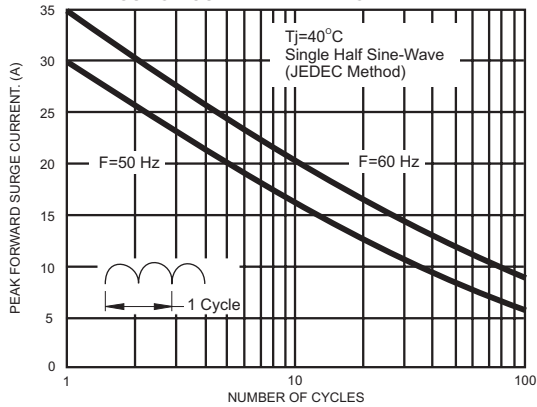


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

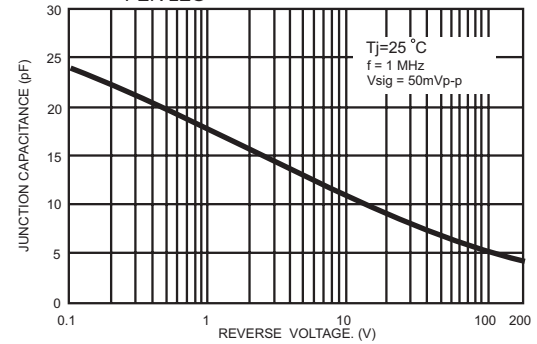


FIG.5- TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

