MBS06 THRU MBS10

SINGLE PHASE GLASS
PASSIVATED SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE: 600V to 1000V **CURRENT: 0.8A**

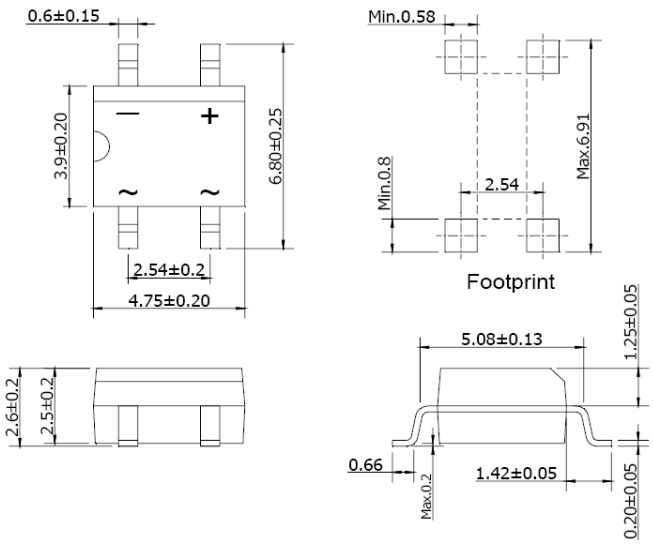
FEATURE

For surface mount application
Reliable low cost construction utilizing molded plastic Technique
Surge overload rating:30A peak

MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002
Case:UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any

MBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	MBS06	MBS08	MBS10	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	800	1000	V
Maximum RMS Voltage	Vrms	420	560	700	V
Maximum DC blocking Voltage	VDC	600	800	1000	V
Maximum Average Forward Rectified Current — on aluminum substrate	If(av)	0.8			A
Maximum Average Forward Rectified Current — on glass-epoxy P.C.B.	If(av)	0.5			A
Peak Forward Surge Current single sine-wave superimposed on rated load(JEDEC Method)	Ifsm	30.0			A
Maximum Instantaneous Forward Voltage at forward current 0.4A	Vf	1.0			V
Maximum DC Reverse Current at rated DC blocking voltage — Ta =25℃	Ir	5.0			μA
Maximum DC Reverse Current at rated DC blocking voltage — Ta =125℃	Ir	100.0			μA
Rating for fusing(t < 8.3ms)	I^2t	5.0			A^2sec
Typical Junction Capacitance (Note1)	Cj	13.0			pF
Typical Thermal resistance — on aluminum substrate	Rth(ja)	70			℃/W
Typical Thermal resistance — on glass-epoxy P.C.B.	Rth(ja)	85			℃/W
Typical Thermal resistance — on glass-epoxy P.C.B.	Rth(jl)	20			℃/W
Storage and Operating Junction Temperature Range	Tstg, Tj	-55 to +150			℃

Note:
1. Measured at 1.0 MHz and applied voltage of 4.0 volt

Fig. 1 - Derating Curve for Output Rectified Current

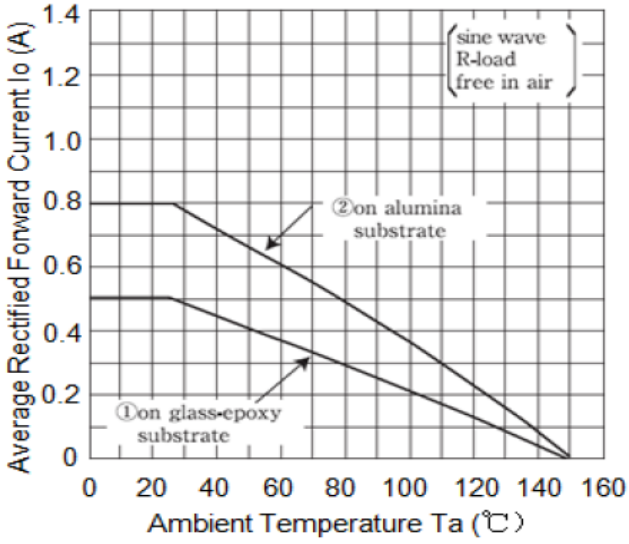


Fig. 2 - Derating Curve for Output Rectified Current

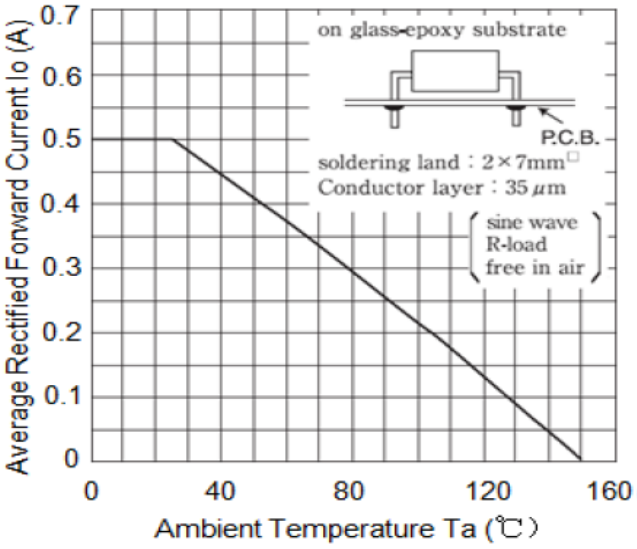


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

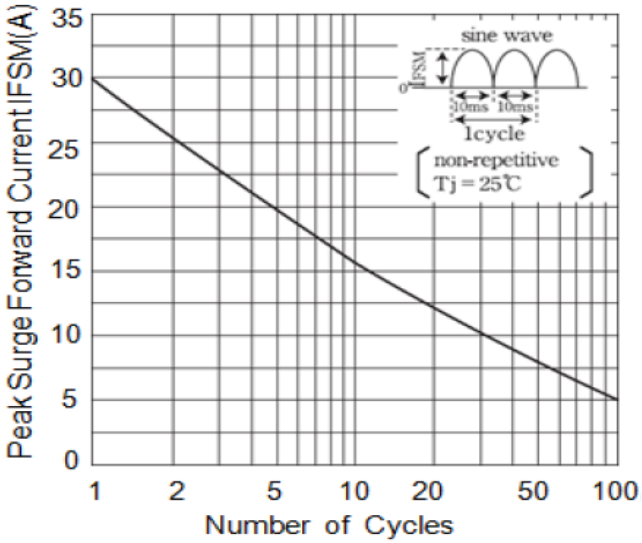


Fig. 4 - Typical Forward Voltage Characteristics Per Leg

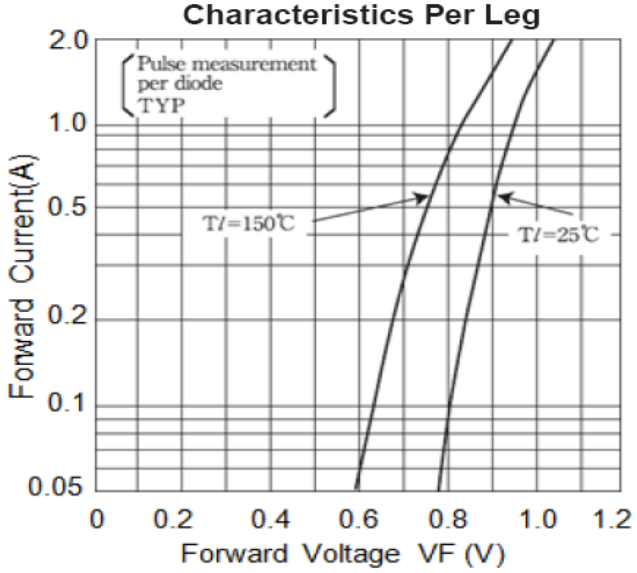


Fig. 5 - Typical Forward Power Dissipation