

MB005 THRU MB10

**SINGLE PHASE GLASS PASSIVATED
SURFACE MOUNT FLAT BRIDGE RECTIFIER**
VOLTAGE: 50 to 1000V CURRENT: 0.8A

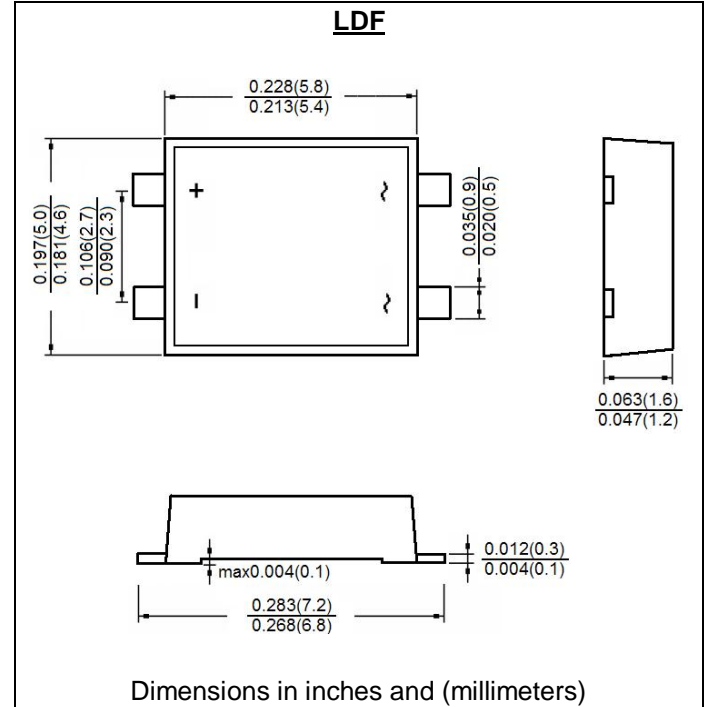


FEATURE

- Low profile space
- Ideal for automated placement
- Glass passivated chip
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering: 260°C/10 seconds

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	MB0 05	MB0 1	MB0 2	MB0 4	MB0 6	MB0 8	MB1 0	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 Rectified Current at Ta =40°C	I _{f(av)}	0.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	35.0							A
Maximum Instantaneous Forward Voltage at forward current 0.4A	V _f	1.0							V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	5.0 100.0							μA
Typical Thermal resistance (Note1)	R _{th(ja)} R _{th(jl)}	70 20							°C/W
Typical Junction Capacitance (Note2)	C _j	15.0							pF
Storage and Operating Junction Temperature Range	T _{stg} , T _j	-55 to +150							°C

- Note:
- On aluminum substrate P.C.B. with an area of 0.8"×0.8"(20×20mm) mounted on 0.05×0.05"(1.3×1.3mm) solder pad
 - Measured at 1.0 MHz and applied voltage of 4.0 volt

Fig.1 Derating Curve For Output Rectified Current

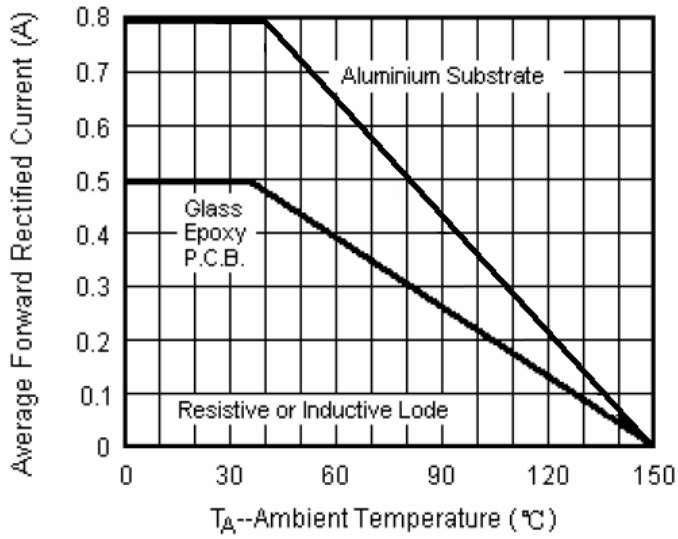


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

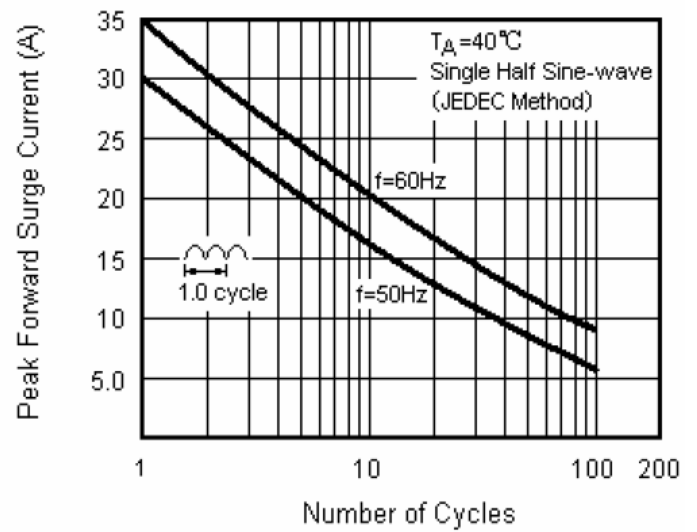


Fig.3 Typical Forward Voltage Characteristics Per Leg

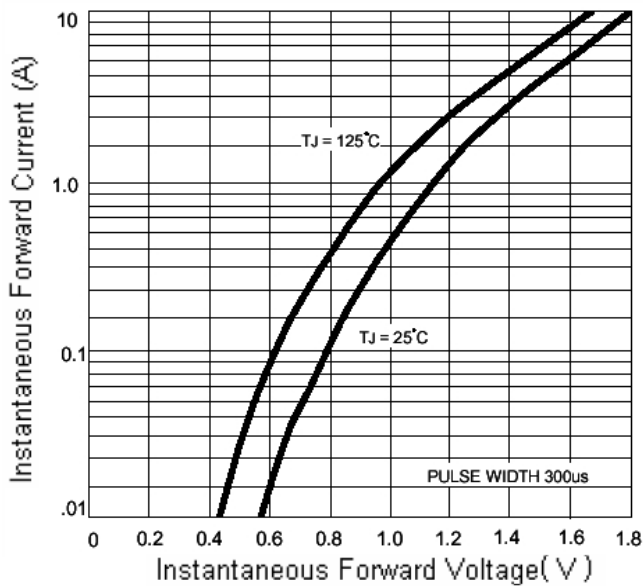


Fig.4 Typical Reverse Leakage Characteristics Per Leg

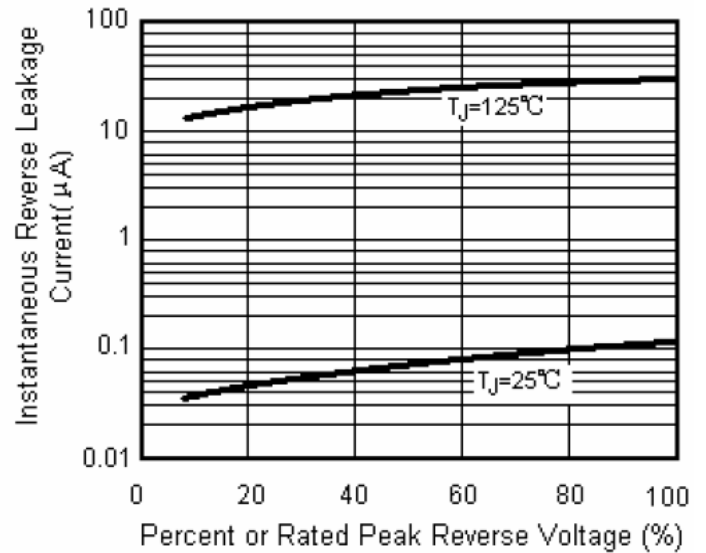


Fig.5 Typical Junction Capacitance Per Leg

