

XMB05F THRU XMB10F

Single Phase Miniature Surface Mount Glass Passivated Bridge Rectifier
Voltage Range: 50-1000V Current: 0.5/0.8Ampere

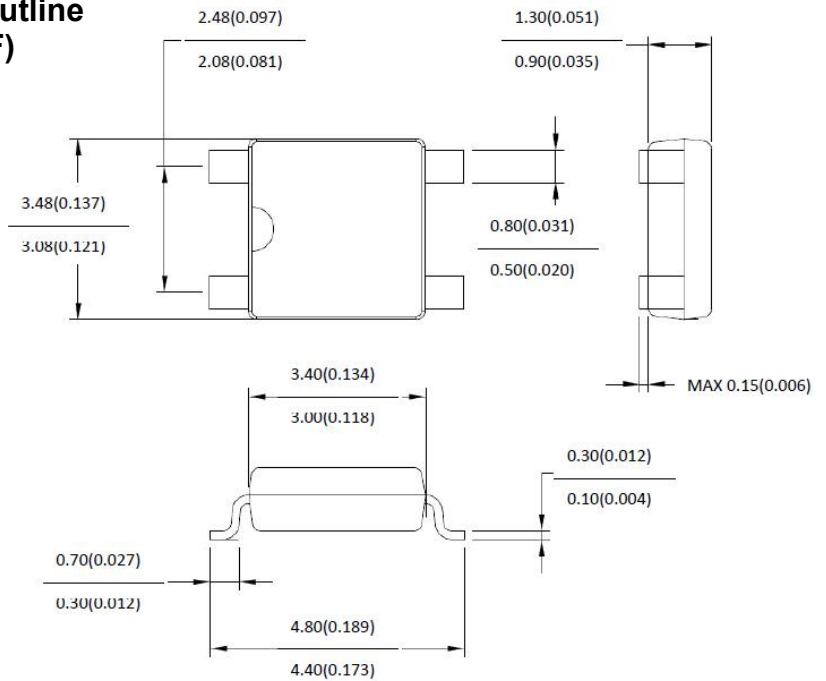
Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- Case: XMBF Molded Plastic
Over glass passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: polarity symbols marked on body

Package Outline (XMBF)



Dimensions in millimeters and (inches)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	XMB 05F	XMB 1F	XMB 2F	XMB 4F	XMB 6F	XMB 8F	XMB 10F	UNITS
Peak Repetitive Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	
DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	
Average Rectified Output Current (Note1) @TA = 30°C On glass-epoxy PCB(1) On aluminum substrate(2)	IF(AV)	0.5 0.8							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	20							A
Forward Voltage per element @IF = 0.4A(3)	VFM	1.0							V
Peak Reverse Current At Rated DC Blocking Voltage @TA = 25°C @TA = 100°C	IRM	5 100							uA
Typical Thermal Resistance from junction to ambient per leg	R θ JA(1) R θ JA(2)	100 80							°C/W
Typical Thermal Resistance from junction to lead per leg	R θ JL	30							°C/W
Operating junction temperature range	TJ	-55 TO 150							°C
Operating and Storage Temperature Range	TSTG	-55 TO 150							°C

Note 1: On glass epoxy P.C.B. mounted on 0.06×0.04" (1.5×1.1mm) pads

Note 2: On aluminum substrate P.C.B. with an area of 0.8×0.8" (20×20mm) mounted on 0.06×0.04" (1.5×1.1mm) solder pad

Note 3: Pulse test: 300µs pulse width, 1% duty cycle.

Ratings and Characteristics Curves (TA=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

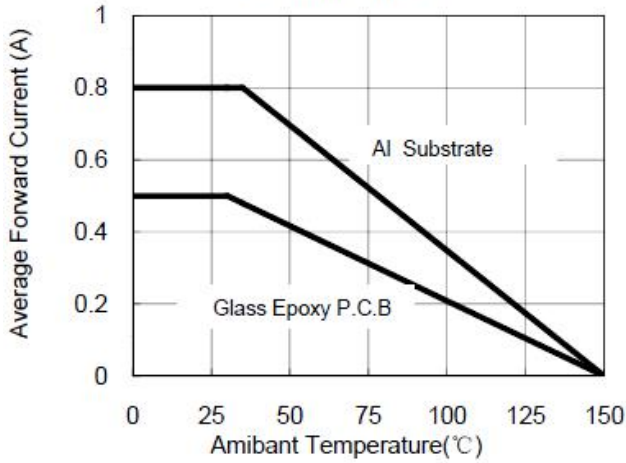


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

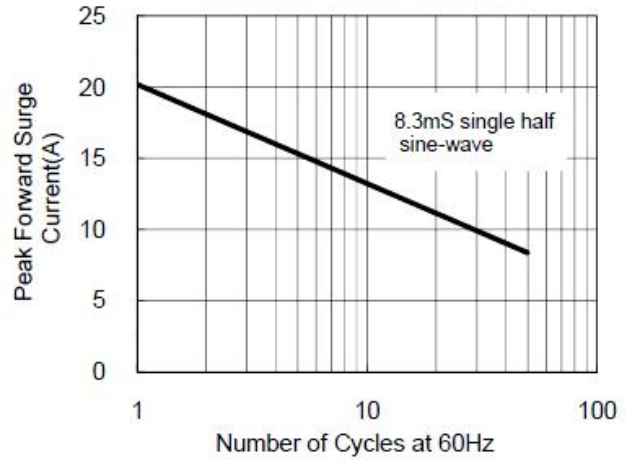


Fig.3 Typical Instantaneous Forward Characteristics

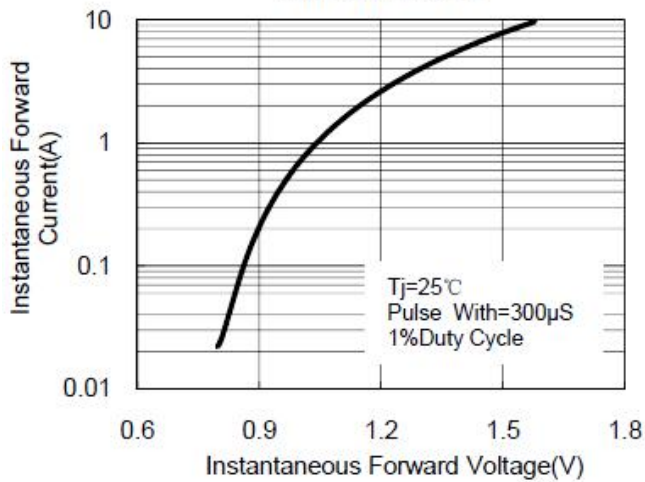


Fig.4 Typical Reverse Leakage Characteristics

