

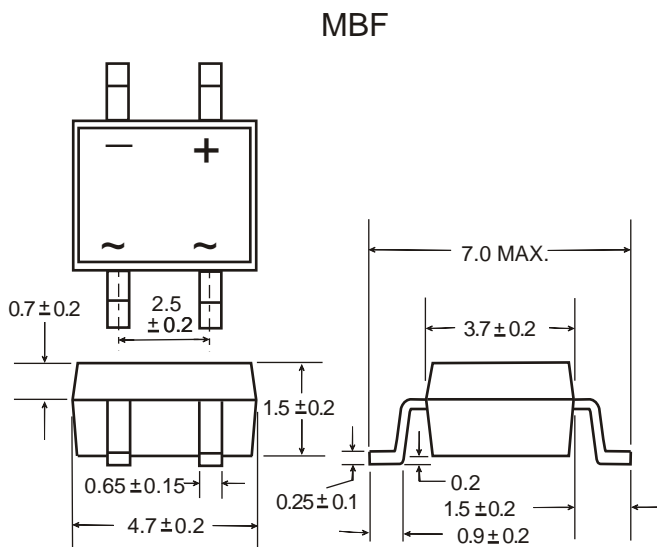
0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application

Mechanical Data

- Case: MB-F, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.082 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version,**



Dimensions in millimeters(1mm = 0.0394")

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	Symbo	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 40^\circ\text{C}$	I_o	0.5							A
Average Rectified Output Current (Note 2) @ $T_A = 40^\circ\text{C}$		0.8							
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	5.0							A^2s
Forward Voltage per element @ $I_F = 0.5\text{A}$	V_{FM}	1.0							V
@ $I_F = 0.8\text{A}$		1.1							
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	I_{RM}	5.0							μA
At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$		500							
Typical Junction Capacitance per leg (Note 3)	C_j	13							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$	60							$^\circ\text{C/W}$
	$R_{\theta JL}$	16							
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

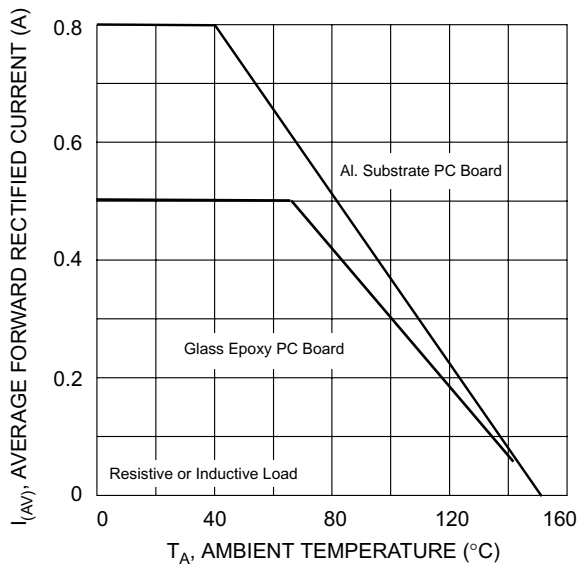


Fig. 1 Output Current Derating Curve

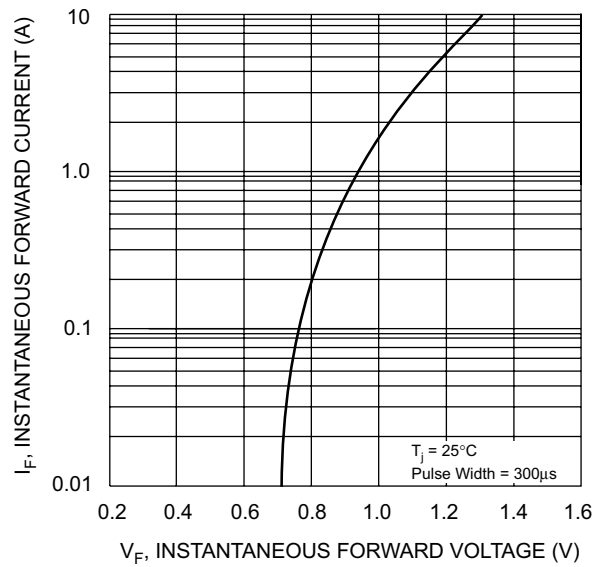


Fig. 2 Typical Forward Characteristics (per leg)

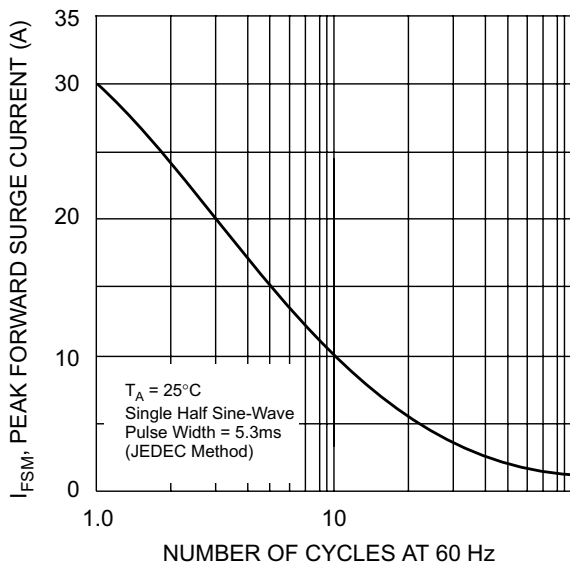


Fig. 3 Maximum Peak Forward Surge Current (per leg)

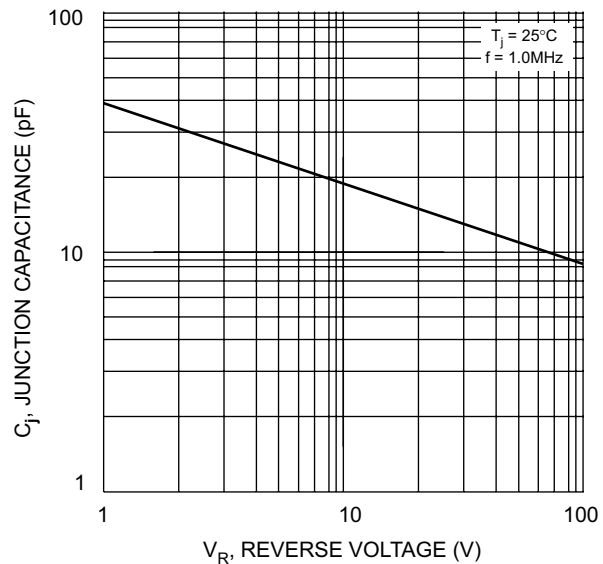


Fig. 4 Typical Junction Capacitance

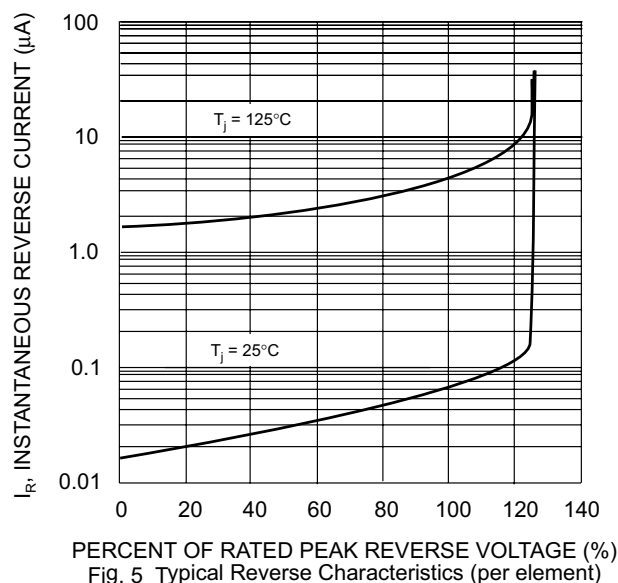


Fig. 5 Typical Reverse Characteristics (per element)