

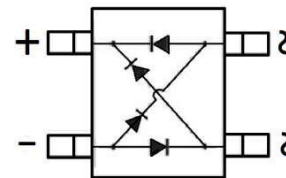
0.8A Fast Recovery Bridge Rectifier

Features

- Glass Passivated Chip Junction
- Reverse Voltage : 200 to 1000V
- Forward Current : 0.8A
- High Surge Current Capability
- High temperature soldering : 260°C/10s at terminals



MBF



Applications

- High-frequency switching power supply
- PFC circuit

Maximum Ratings and Electrical characteristics

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

Parameter		Symbol	FMB2F	FMB4F	FMB6F	FMB8F	FMB10F	Unit
Maximum Repetitive 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.(Note1)	$I_{F(AV)}$	0.8				A	
	On aluminum substrate(Note2)							
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)		I_{FSM}	30				A	
Maximum Instantaneous Forward Voltage @0.8A		V_F	1.3				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	5.0				μA	
	$T_A=125^\circ\text{C}$		100					
Maximum Reverse Recovery Time $T=25^\circ\text{C}$ (Note 3)		T_{RR} $T_{RR(TYP.)}$	500 300				nS	
Typical Junction Capacitance(Note 1)		C_J	12				pF	
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	90				$^\circ\text{C/W}$		
	$R_{\theta JC}$	30						
Operating Junction Temperature Range		T_J, T_{stG}	(-55 to +150)				$^\circ\text{C}$	

Notes:

1. Reverse Recovery Time test condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

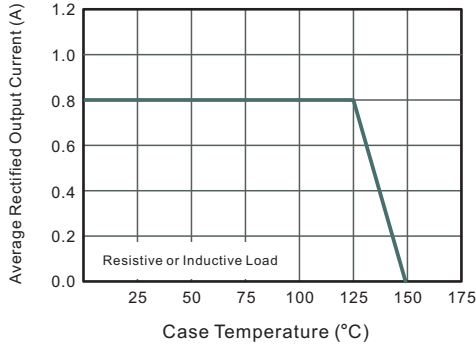


Fig.2 Typical Reverse Characteristics

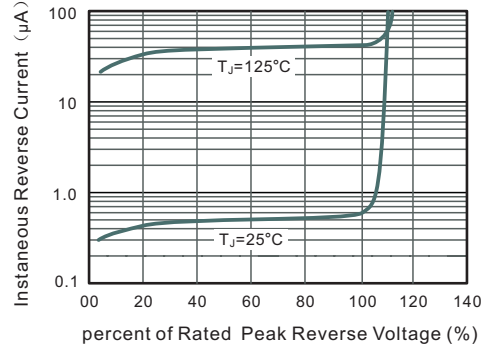


Fig.3 Typical Instantaneous Forward Characteristics

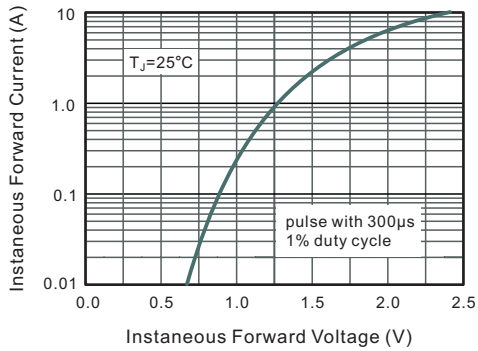


Fig.4 Typical Junction Capacitance

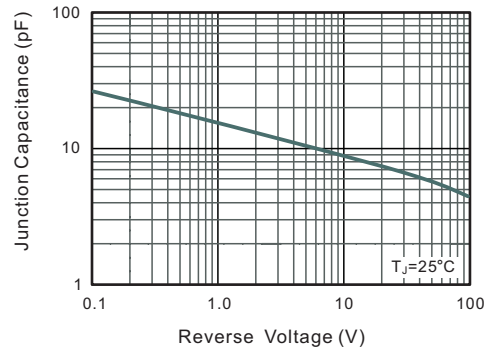
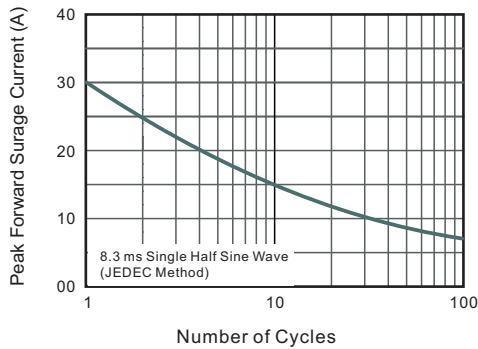
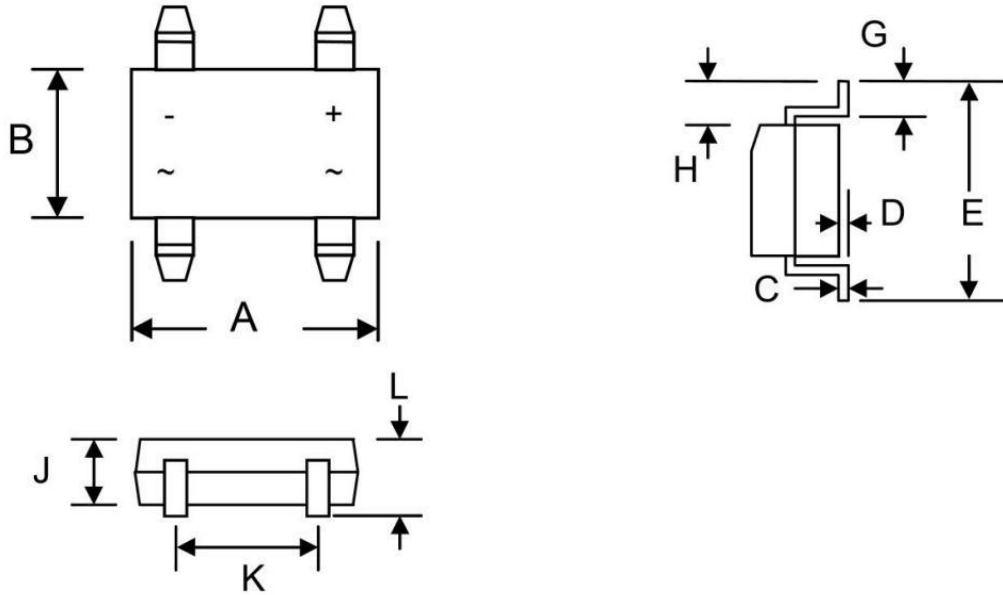


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



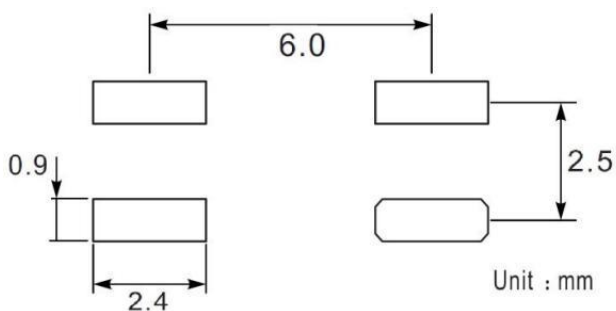
Package Outlines (Dimensions in mm)

Plastic surface mounted package(MBF)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.95	0.177	0.195
B	3.60	4.10	0.142	0.161
C	0.15	0.35	0.006	0.014
D	-----	0.20	-----	0.008
E	6.40	7.00	0.252	0.276
G	0.50	1.10	0.020	0.043
H	1.30	1.70	0.051	0.067
J	1.20	1.60	0.047	0.063
K	2.30	2.70	0.091	0.106
L	-----	1.80	-----	0.071

The recommended mounting pad size



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

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