

1A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER
Feature

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 1 A
- High Surge Current Capability
- Designed for Surface Mount Application

Mechanical Characteristics

- Case: MBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 75mg 0.0026oz

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	Sym bol	MB1F -10	MB2F -10	MB4F -10	MB6F -10	MB8F -10	MB10 F-10	U nit s
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at Ta=50°C	I _O	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	35						A
Maximum Forward Voltage at 1.0 A	V _F	1.1						V
Maximum DC Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =125°C	I _R	5 40						μA
Typical Junction Capacitance (Note 1)	C _j	13						pF
Typical Thermal Resistance (Note 2)	R _{θJA} R _{θjl}	85 30						°C /W
Operating and Storage Temperature Range	T _J , T _{ST} G	-55 to +150						°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4 × (5 × 5mm²) copper pad.

Typical Characteristics

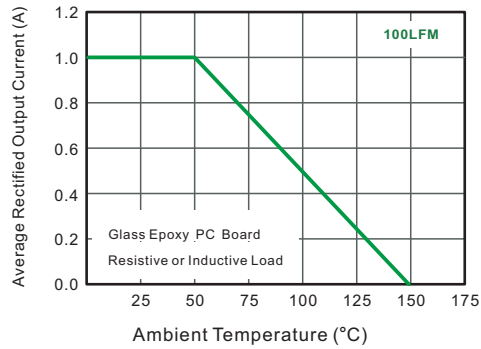


Fig.1 Average Rectified Output Current Derating Curve

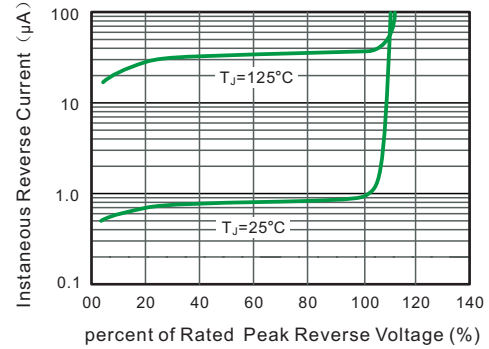


Fig.2 Typical Reverse Characteristics

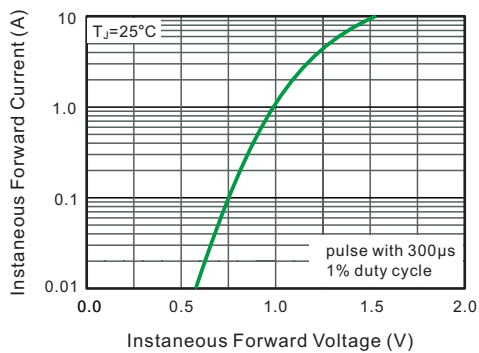


Fig.3 Typical Instantaneous Forward Characteristics

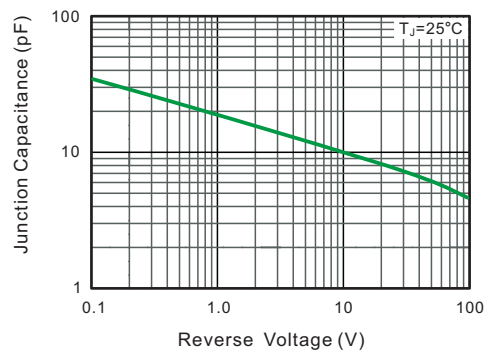


Fig.4 Typical Junction Capacitance

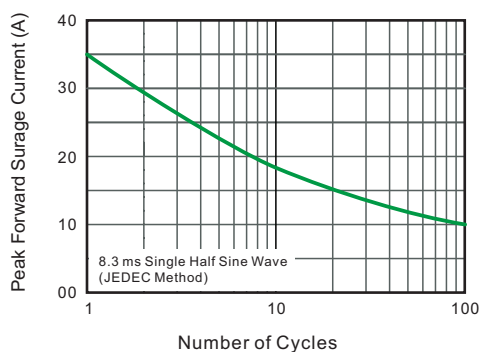
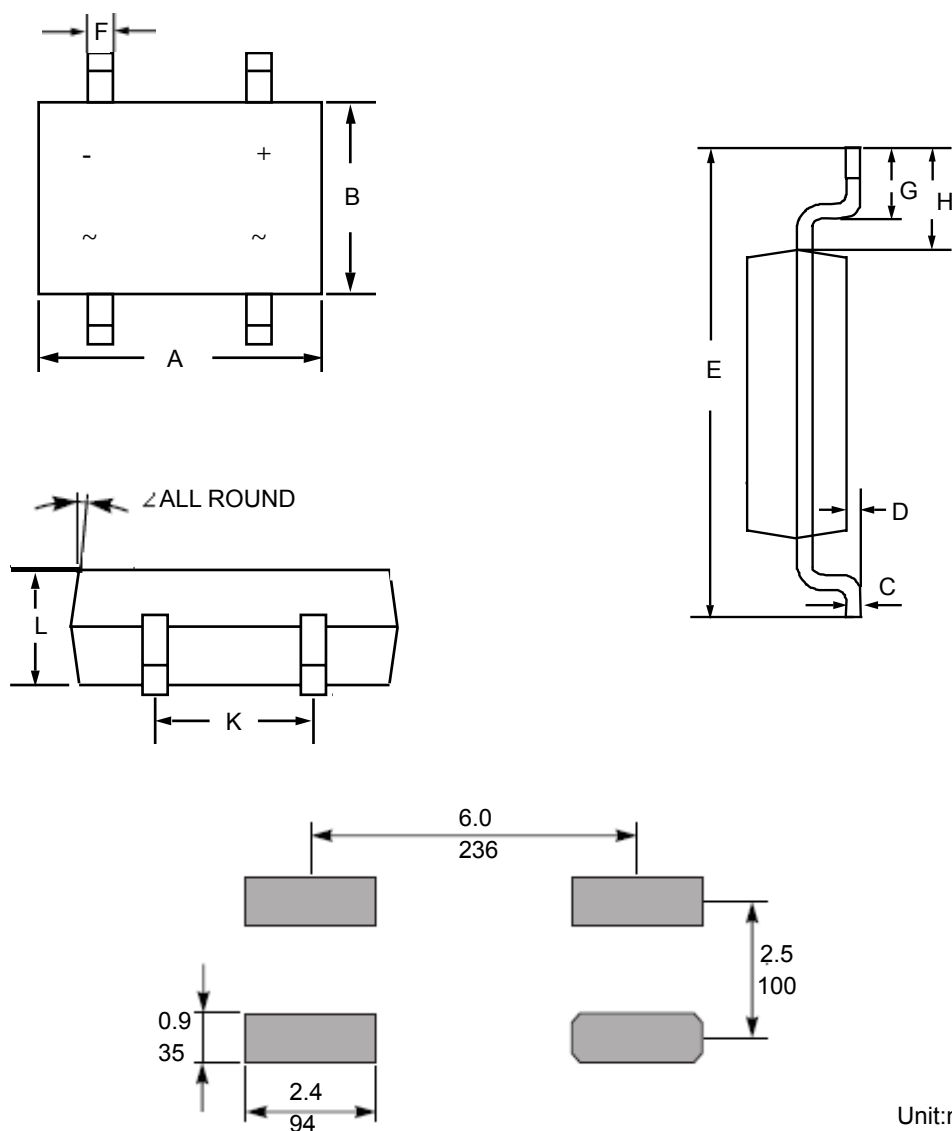


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

Product dimension (MBF)



Unit:mm

Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	177.00	197.00	4.50	5.00
B	142.00	161.00	3.60	4.10
C	5.90	8.70	0.15	0.22
D	--	8.00	--	0.20
E	252.00	276.00	6.40	7.00
G	20.00	43.00	0.50	1.10
H	51.00	67.00	1.30	1.70
K	91.00	106.00	2.30	2.70
L	47.00	63.00	1.20	1.60
F	20.00	31.00	0.50	0.80

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