

## MB1F-10~MB10F-10

# **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 <sub>RRM</sub>	100	200	400	600	800	1000	v
Maximum RMS voltage	V <sub>RMS</sub>	70	140	280	420	560	700	v
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	800	1000	v
Average Rectified Output Current at Ta=50°C	Ιο	1.0					А	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	35						А
Maximum Forward Voltage at 1.0 A	V <sub>F</sub>	1.1					V	
Maximum DC Reverse Current @T <sub>A=</sub> 25℃ at Rated DC Blocking Voltage @T <sub>A=</sub> 125℃	I <sub>R</sub>	5 40						μA
Typical Junction Capacitance (Note 1)	Cj	13					pF	
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub> R <sub>θjl</sub>	85 30					°C /W	
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>ST</sub> G	-55 to +150					°C	

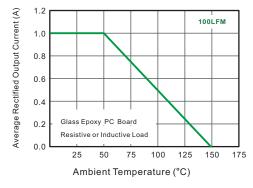
### Note:

- 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
- 2. Mounted on glass epoxy PC board with  $4 \times (5 \times 5 \text{mm}^2)$  copper pad.

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#### **Typical Characteristics**





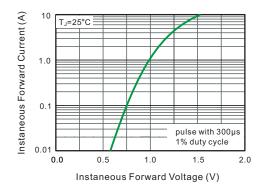


Fig.3 Typical Instaneous Forward Characteristics

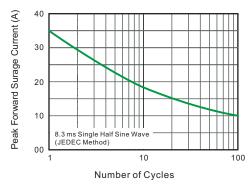


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

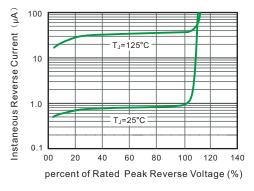


Fig.2 Typical Reverse Characteristics

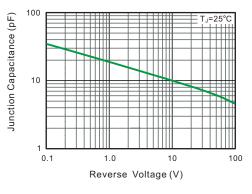
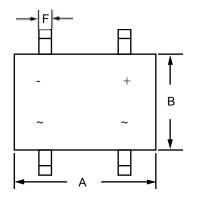


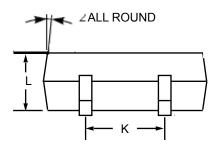
Fig.4 Typical Junction Capacitance

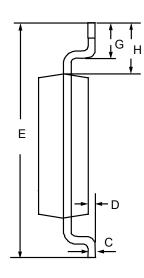
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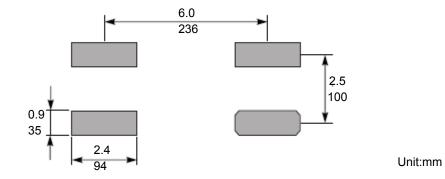
### MB1F-10~MB10F-10

## Product dimension (MBF)









Dim	Inches		Millimeters		
	MIN	MAX	MIN	МАХ	
А	177.00	197.00	4.50	5.00	
В	142.00	161.00	3.60	4.10	
С	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	
Н	51.00	67.00	1.30	1.70	
К	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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