

### FEATURES:

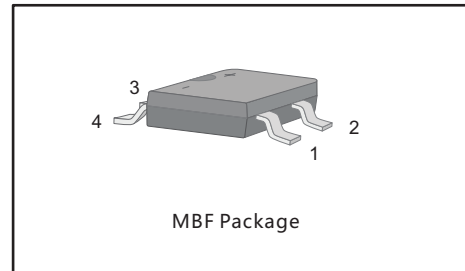
- Glass Passivated Chip Junction
- Reverse Voltage - 40 to 200 V
- Forward Current - 2 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: MBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 75mg 0.0024oz

### PINNING

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

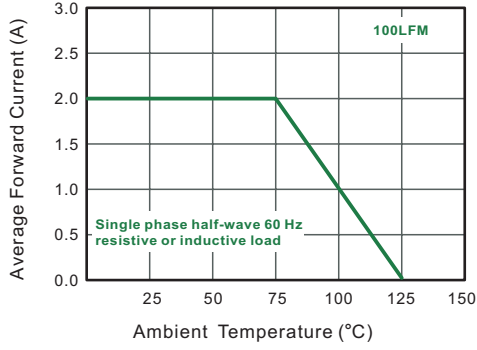
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB24F	MB26F	M28F	MB210F	MB220F	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	60	80	100	200	V
Maximum RMS voltage	$V_{RMS}$	28	42	56	70	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	80	100	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50		40			A
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55	0.70	0.85			V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	$I_R$	0.5 10			0.3 5		mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	220	80				pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	115					°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +125					°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150					°C

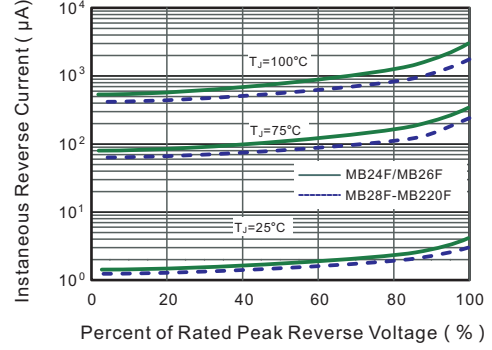
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> copper pad.

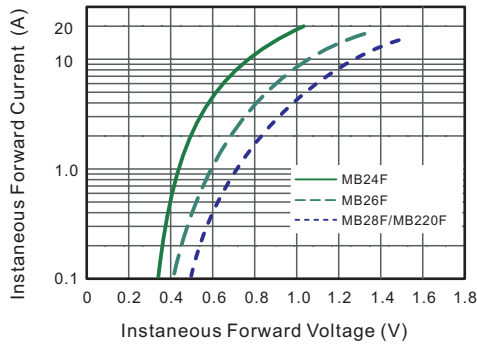
**Fig.1 Forward Current Derating Curve**



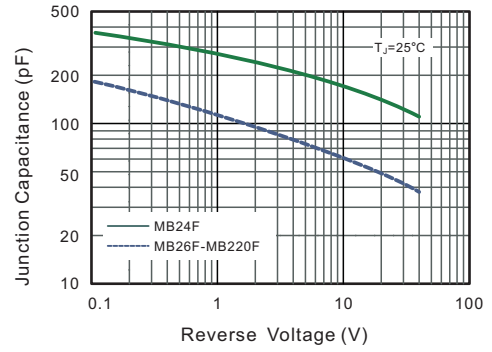
**Fig.2 Typical Reverse Characteristics**



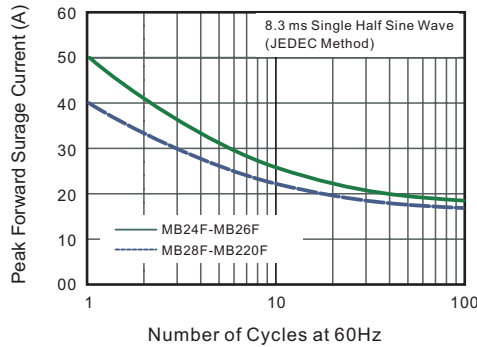
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



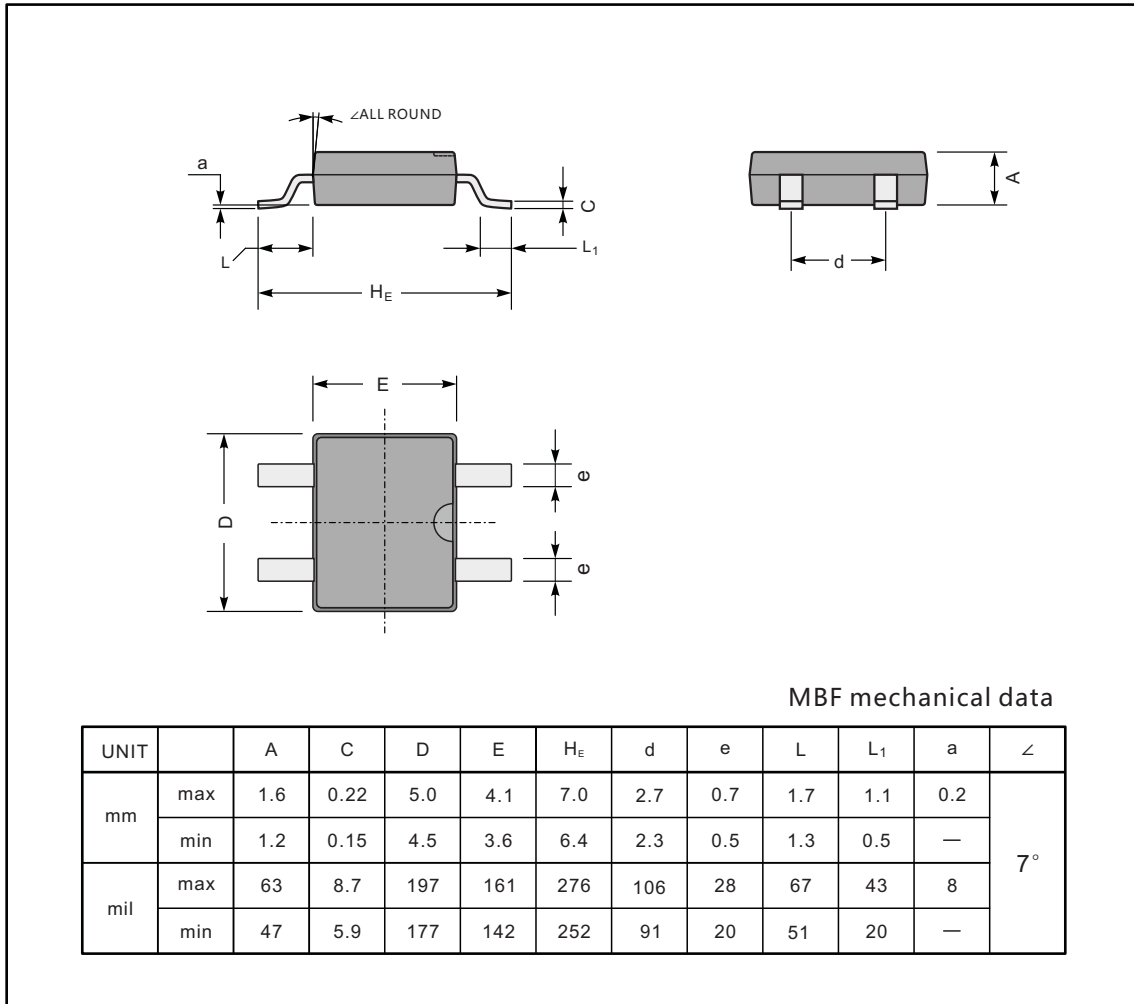
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



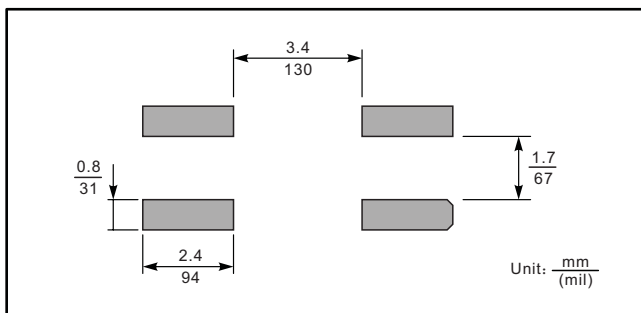
### PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

MBF



### The recommended mounting pad size



### Marking

Type number	Marking code
MB24F	MB24F
MB26F	MB26F
MB28F	MB28F
MB210F	MB210F
MB220F	MB220F

