



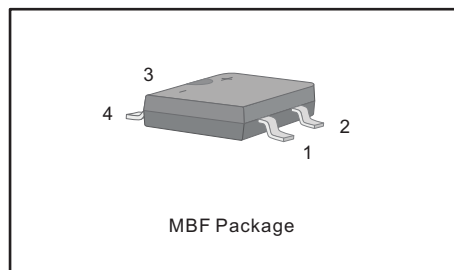
### 3A SURFACE MOUNT SCHOTTKY BRIDGE

#### FEATURES:

- Reverse Voltage - 40 to 200 V
- Forward Current - 3 A
- High Surge Current Capability
- Designed for Surface Mount Application

#### PINNING

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



#### MECHANICAL DATA

- 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	Symbols	MB34F	MB36F	MB38F	MB310F	MB320F	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 at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.0					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80		70			A
Max Instantaneous Forward Voltage at 3 A	$V_F$	0.55	0.70	0.85		0.95	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5 10	0.3 5				mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	220	160			100	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	65					$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	-55 ~ +150					$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150					$^\circ\text{C}$

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

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad.



Fig.1 Forward Current Derating Curve

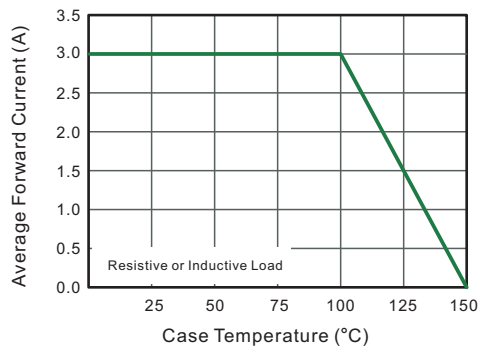


Fig.2 Typical Reverse Characteristics

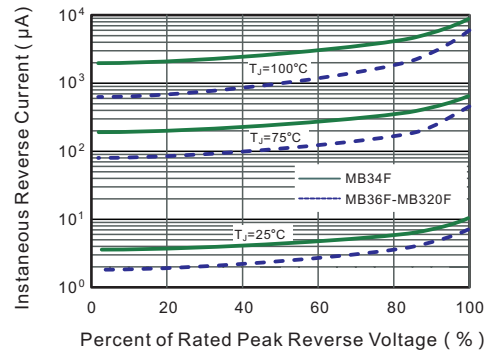


Fig.3 Typical Forward Characteristic

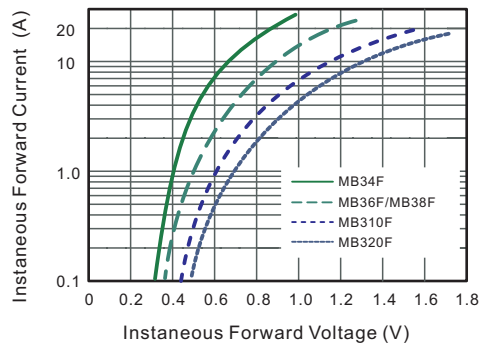


Fig.4 Typical Junction Capacitance

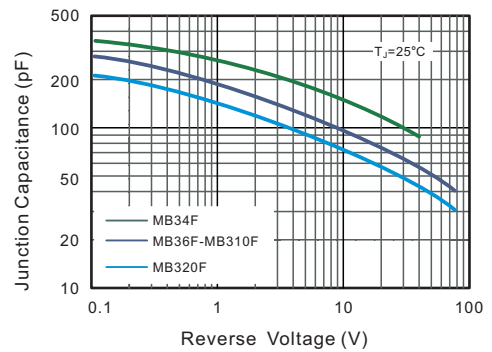


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

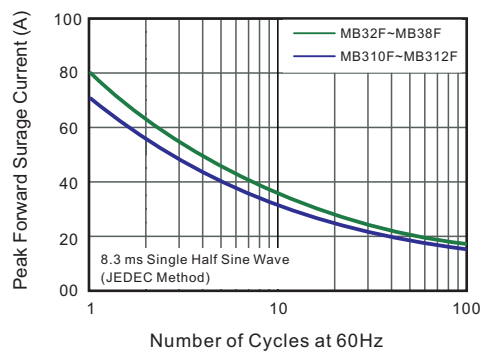
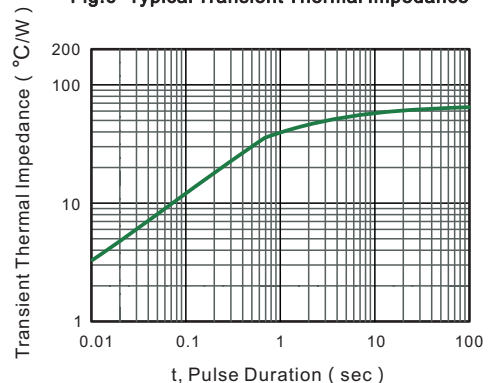


Fig.6 Typical Transient Thermal Impedance

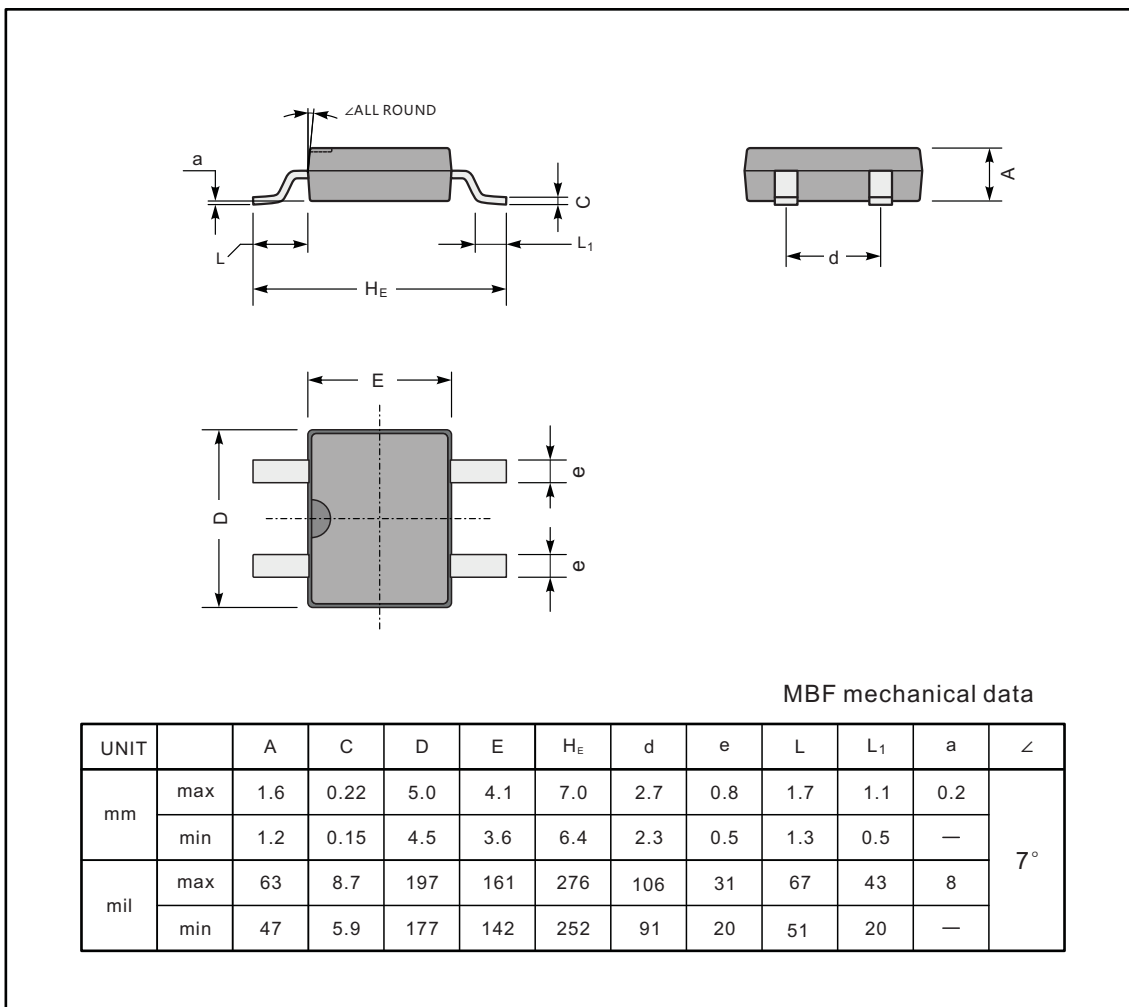




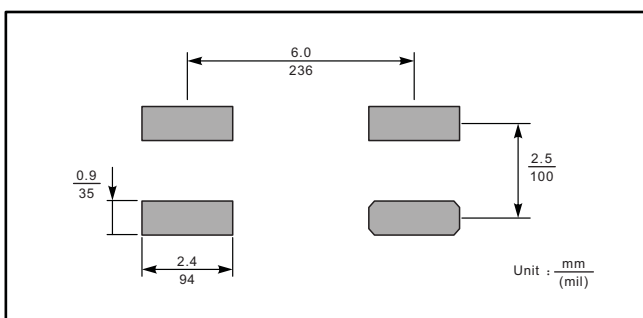
**PACKAGE OUTLINE**

Plastic surface mounted package; 4 leads

MBF



**The recommended mounting pad size**



**Marking**

Type number	Marking code
MB34F	MB34F
MB36F	MB36F
MB38F	MB38F
MB310F	MB310F
MB320F	MB320F