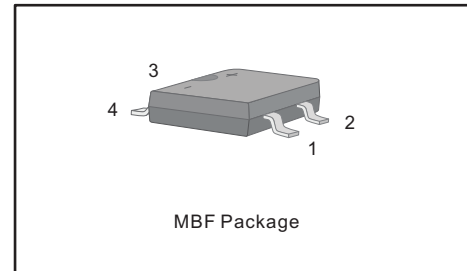


**1A SURFACE MOUNT SCHOTTKY BRIDGE**
**FEATURES:**

- Reverse Voltage - 40 to 200 V
- Forward Current - 1 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 0.0024oz

**Maximum Ratings and Electrical characteristics**

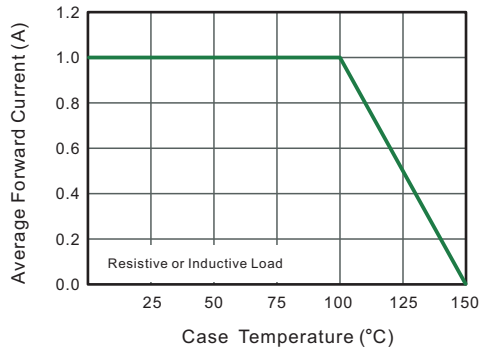
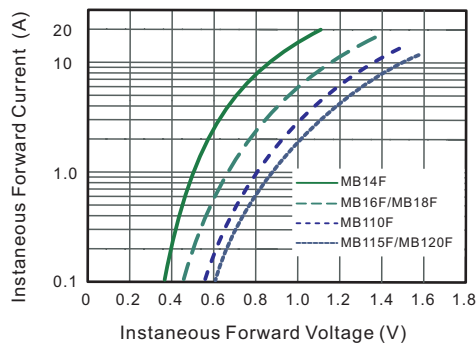
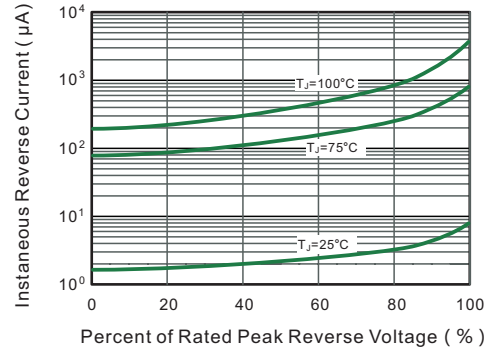
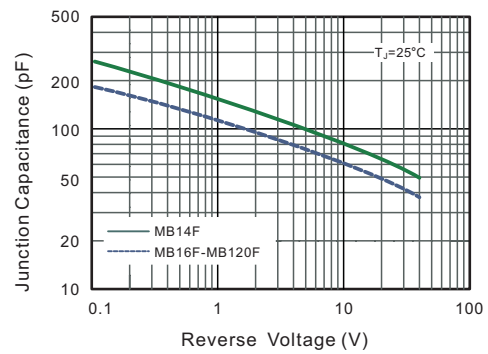
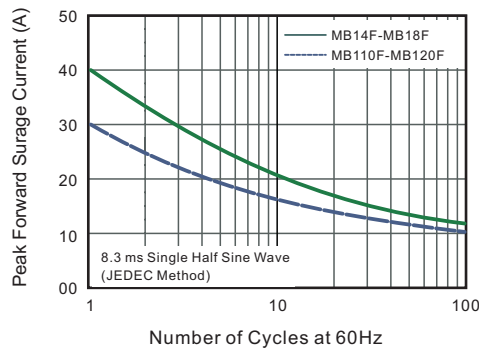
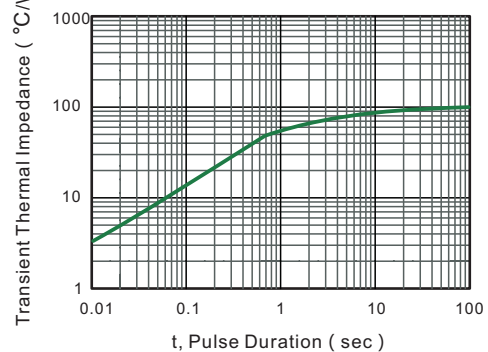
Ratings at 25 °C ambient temperature unless otherwise specified.

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

Parameter	Symbols	MB14F	MB16F	MB18F	MB110F	MB115F	MB120F	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	40			30			A
Max Instantaneous Forward Voltage at 1 A	$V_F$	0.55	0.70		0.85	0.90		V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	$I_R$	0.3 10			0.2 5	0.1 2		mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	110	80				pF	
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	100						°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +150						°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150						°C

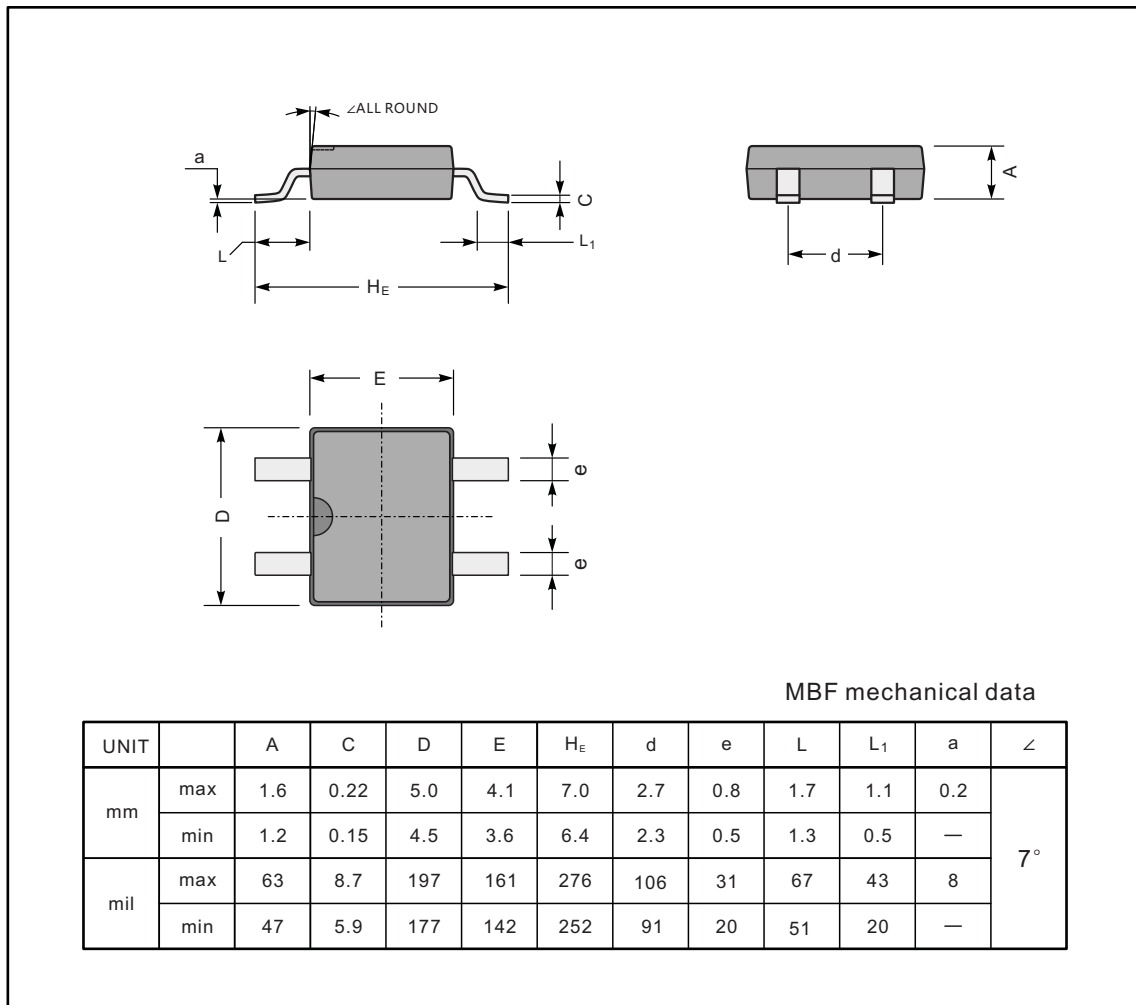
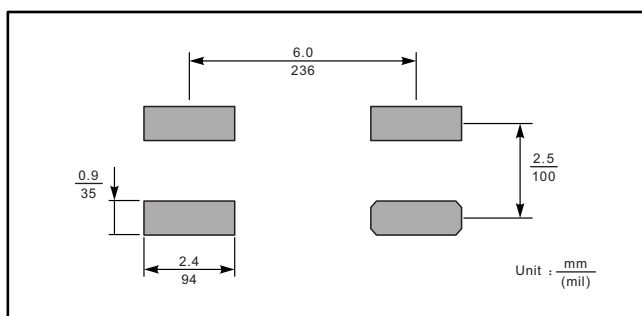
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

**Fig.1 Forward Current Derating Curve**

**Fig.2 Typical Reverse Characteristics**

**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
MB14F	MB14F
MB16F	MB16F
MB18F	MB18F
MB110F	MB110F
MB115F	MB115F
MB120F	MB120F