MB24F THRU MB220F

2A SURFACE MOUNT SCHOTTKY BRIDGE

FEATURES:

Reverse Voltage - 40 to 200 V

Forward Current - 2 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 (-)

MBF Package

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	MB24F	MB26F	MB28F	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 at T_c = 90 °C	$I_{F(AV)}$	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°C at Rated DC Reverse Voltage T_a =100°C	I_R	0.5 10		0.3 5			mA
Typical Junction Capacitance [1]	C_j	220	80				pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	75					°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 with4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Fig.1 Forward Current Derating Curve

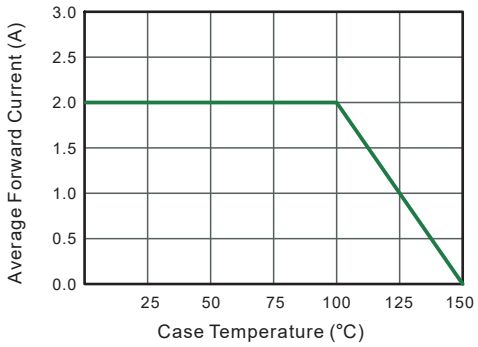


Fig.2 Typical Reverse Characteristics

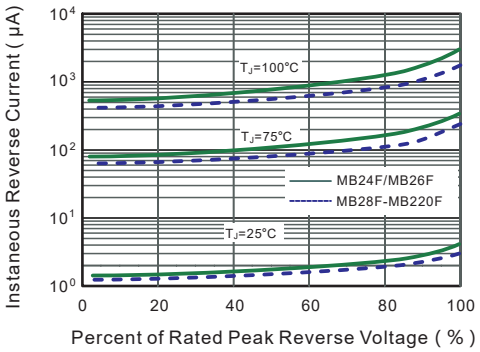


Fig.3 Typical Forward Characteristic

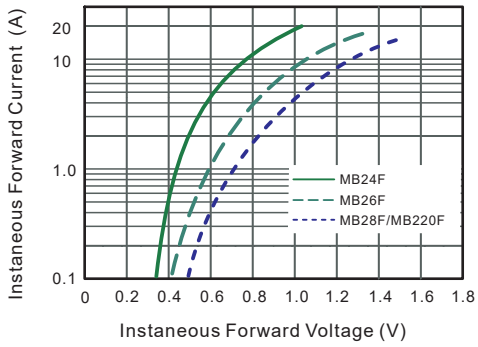


Fig.4 Typical Junction Capacitance

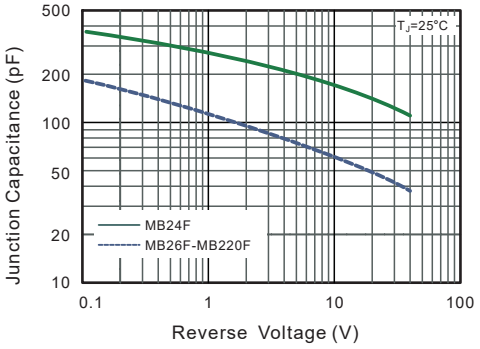


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

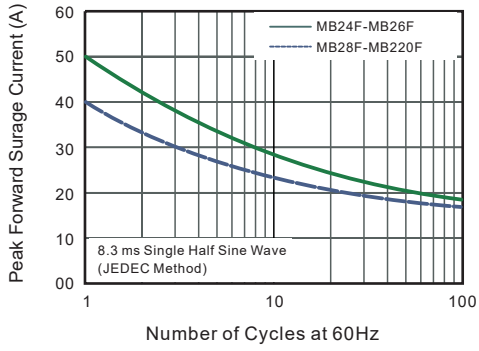
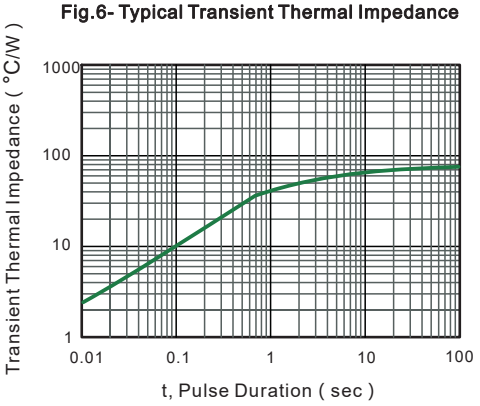


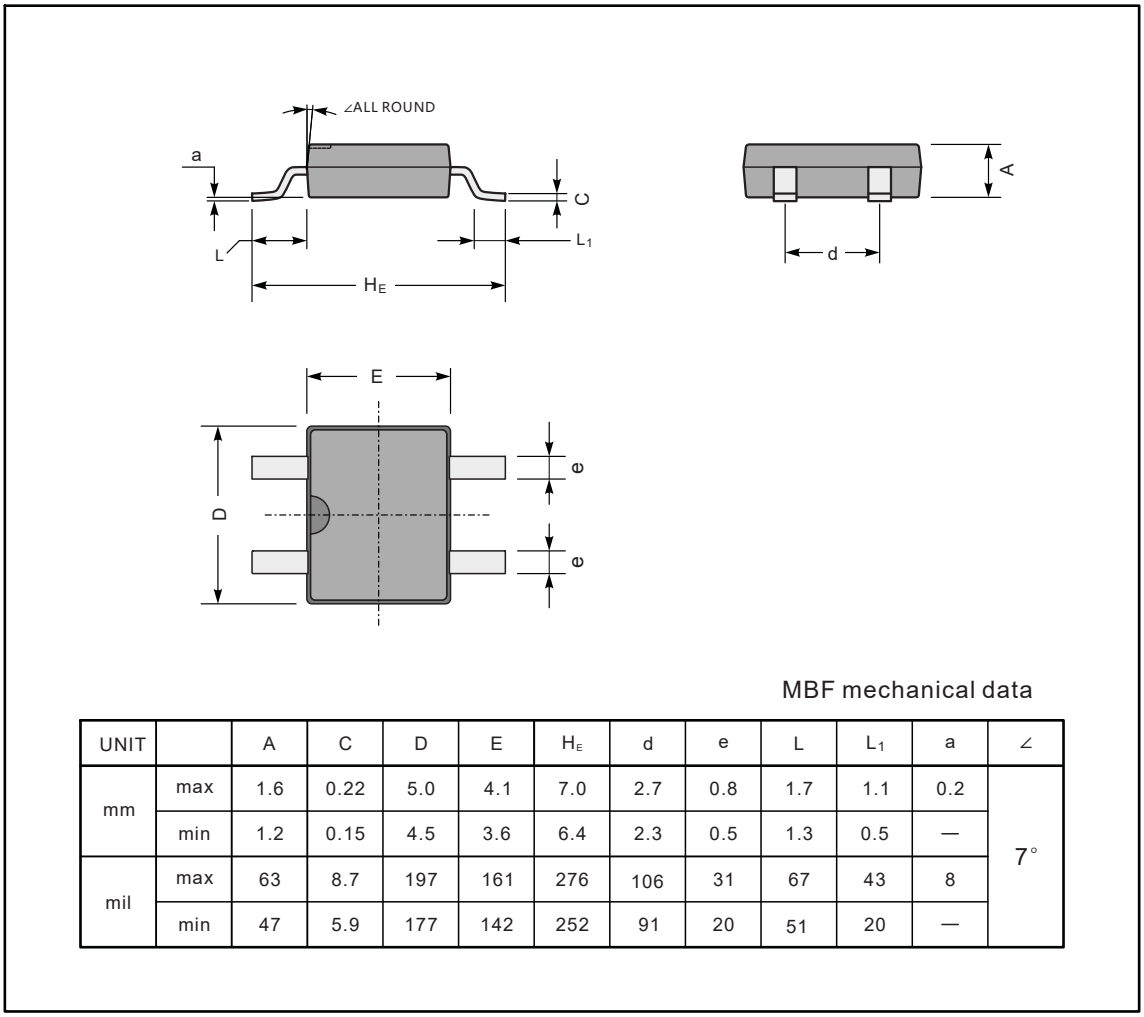
Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

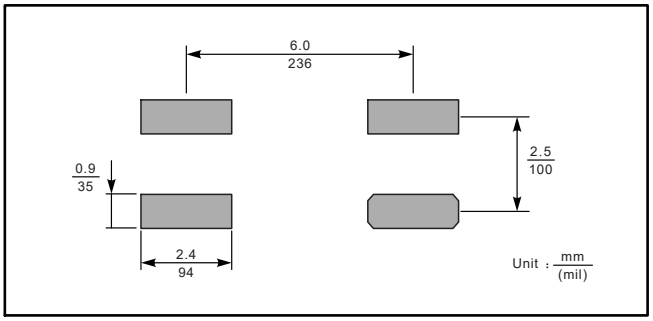
MBF



MBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	∠
mm	max	1.6	0.22	5.0	4.1	7.0	2.7	0.8	1.7	1.1	0.2	7°
	min	1.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	63	8.7	197	161	276	106	31	67	43	8	
	min	47	5.9	177	142	252	91	20	51	20	—	

The recommended mounting pad size



Marking

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