

3A SURFACE MOUNT SCHOTTKY BRIDGE

FEATURES:

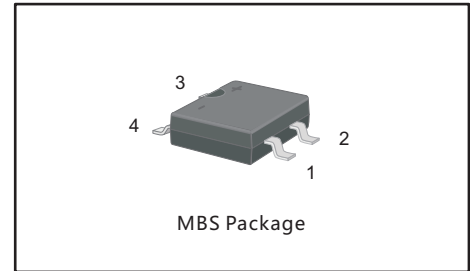
- Reverse Voltage - 40 to 200 V
- Forward Current - 3 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: MBS
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 100mg / 0.0035oz

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	MB34S	MB36S	MB38S	MB310S	MB320S	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	$I_{F(AV)}$	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 $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	I_R	0.5 10	0.3 5				mA
Typical Junction Capacitance ¹⁾	C_j	250	160				pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	60					$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +125					$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150					$^{\circ}C$

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

2. Mounted on glass epoxy PC board with $4 \times (5 \times 5mm^2)$ copper pad.

Fig.1 Forward Current Derating Curve

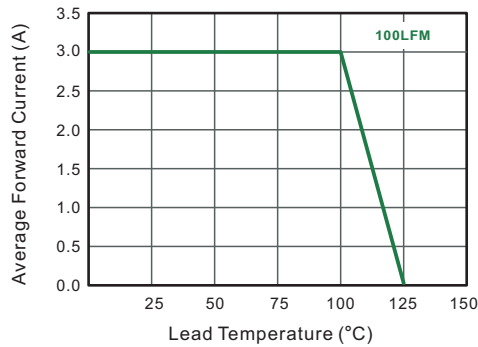


Fig.2 Typical Reverse Characteristics

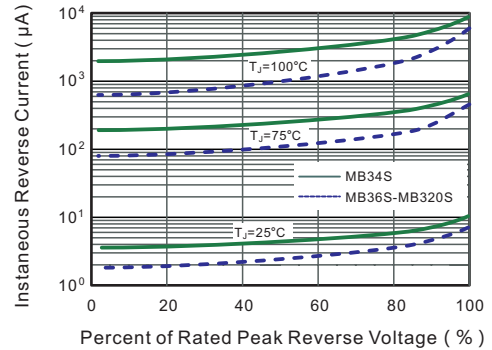


Fig.3 Typical Forward Characteristic

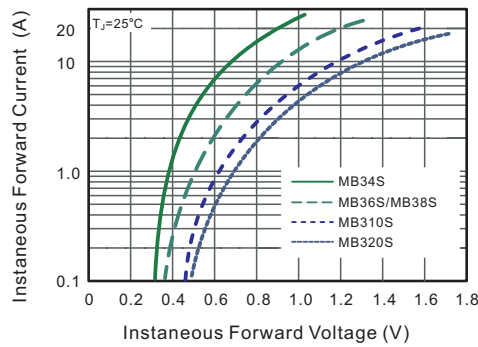


Fig.4 Typical Junction Capacitance

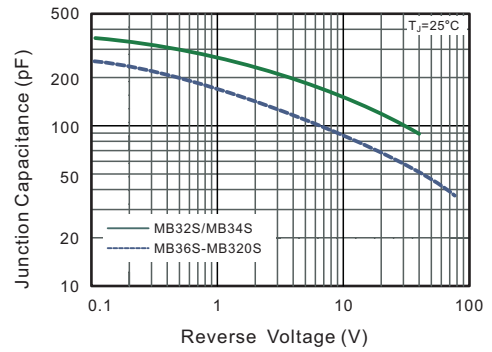


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

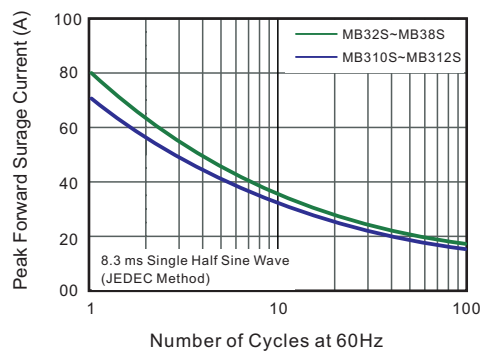
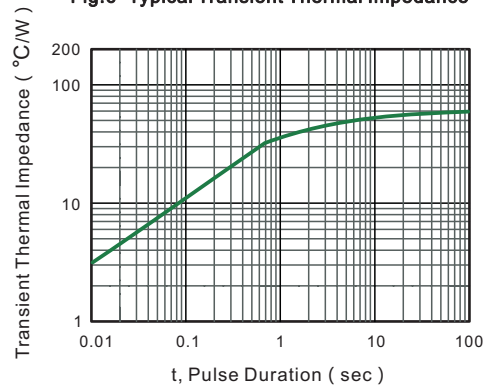


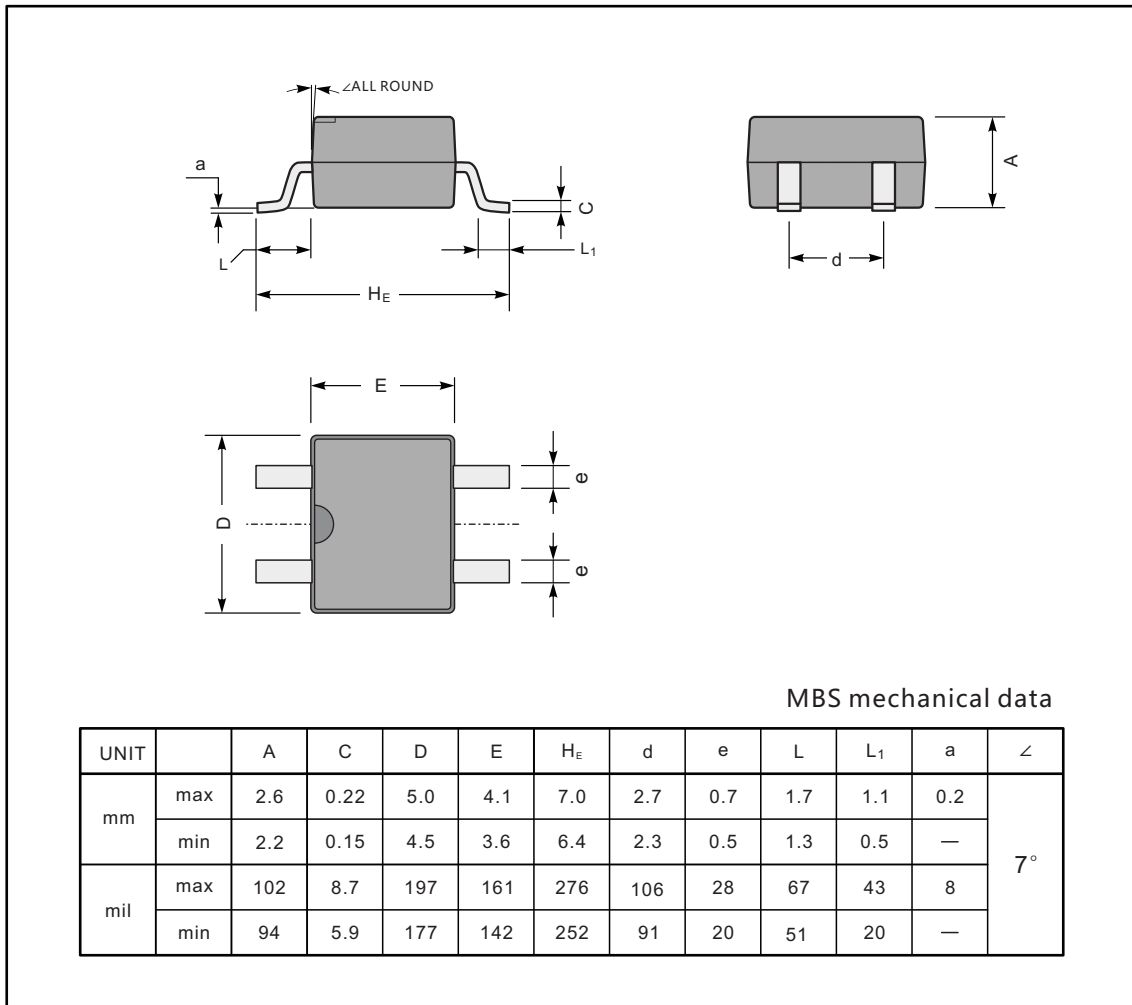
Fig.6 Typical Transient Thermal Impedance



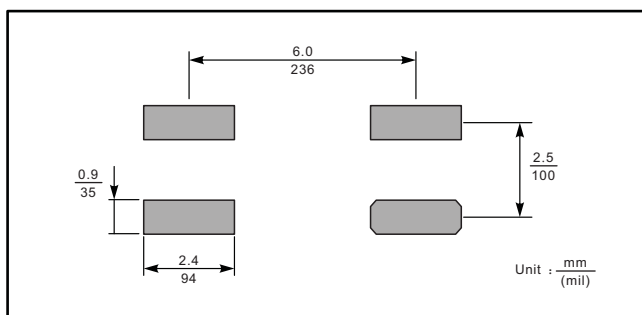
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

MBS



The recommended mounting pad size



Marking

Type number	Marking code
MB34S	MB34S
MB36S	MB36S
MB38S	MB38S
MB310S	MB310S
MB320S	MB320S

