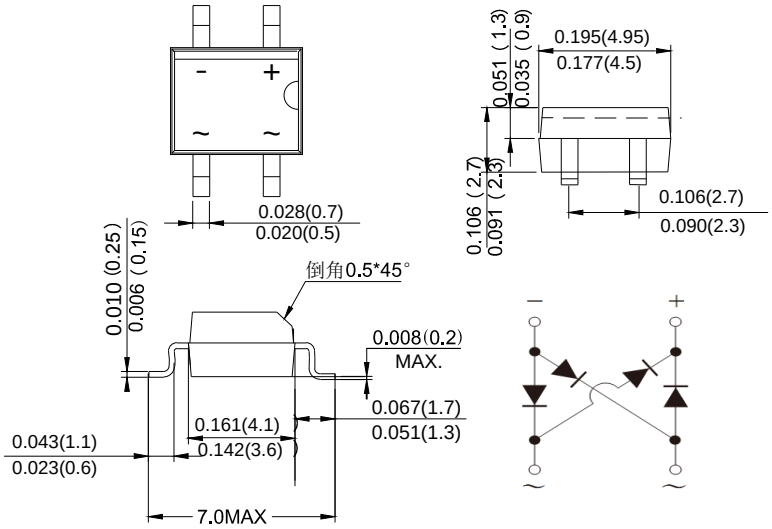
MB34S THRU MB320S

3A SURFACE MOUNT SCHOTTKY BRIDGE

MBS



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
- Approx. Weight: 100mg / 0.0035oz

Maximum Ratings and Electrical characteristics dimensions in inches and (millimeters)

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°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	250	160				pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	60					°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 4×（5×5mm^2 ）copper pad.

Fig.1 Forward Current Derating Curve

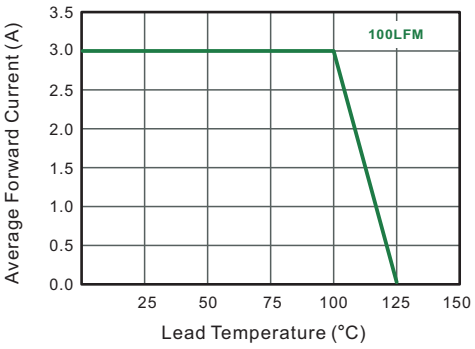


Fig.2 Typical Reverse Characteristics

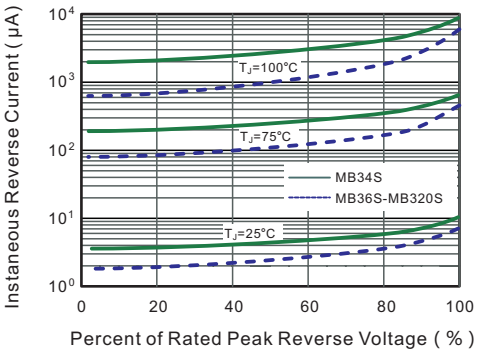


Fig.3 Typical Forward Characteristic

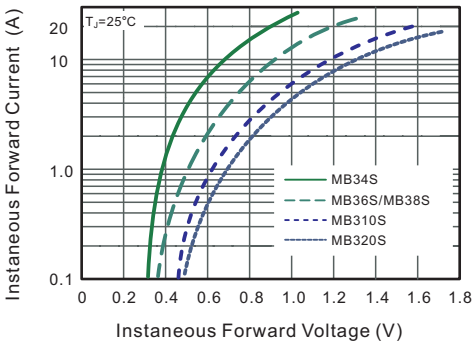


Fig.4 Typical Junction Capacitance

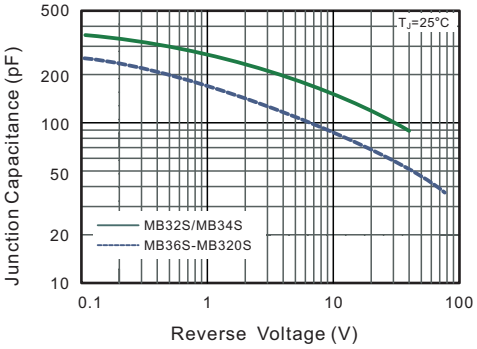


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

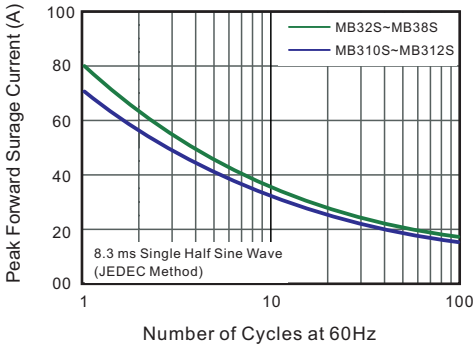


Fig.6- Typical Transient Thermal Impedance