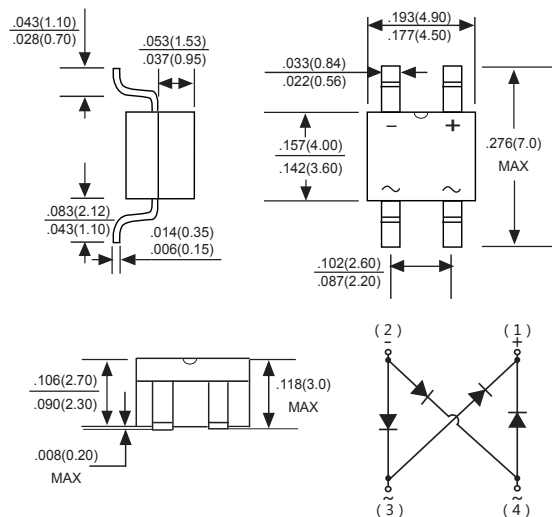


Schottky Surface Mount Flat Bridge Rectifier

Features

- ◆ Reverse Voltage - 40 to 200 V
- ◆ Forward Current - 3.0 A
- ◆ High Surge Current Capability
- ◆ Designed for Surface Mount Application



Mechanical Data

Case : JEDEC MBS Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.008 ounce, 0.22 grams

Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	SYMBOLS	MDD MB34S	MDD MB36S	MDD MB38S	MDD MB310S	MDD MB320S	UNITS
Marking Code							
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}	50		70			A
Maximum instantaneous forward voltage at 2A	V _F	0.55	0.70	0.85		0.95	V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5 10	0.3 5				mA
Typical junction capacitance at 4.0V, 1.0MHz	C _j	250	160				pF
Typical thermal resistance	R _{θJA}	65					°C/W
Operating temperature range	T _J	- 5 5 t o + 1 2 5					°C
storage temperature range	T _{STG}	-55 to +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.

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

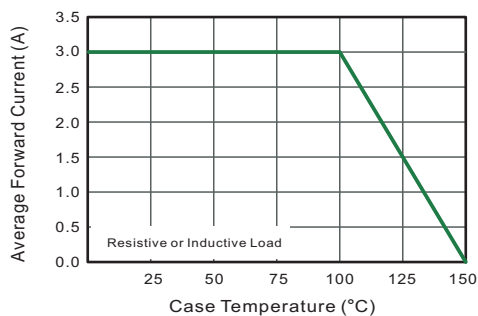


Fig.2 Typical Reverse Characteristics

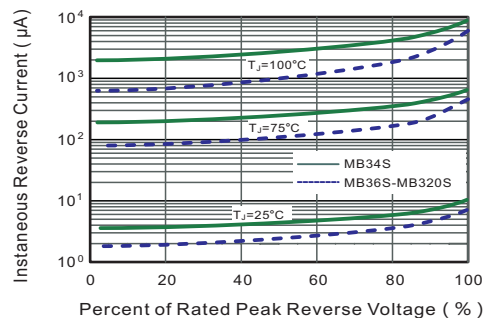


Fig.3 Typical Forward Characteristic

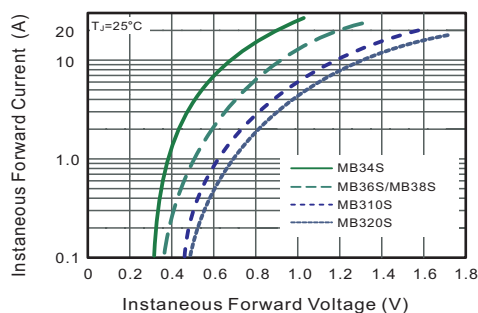


Fig.4 Typical Junction Capacitance

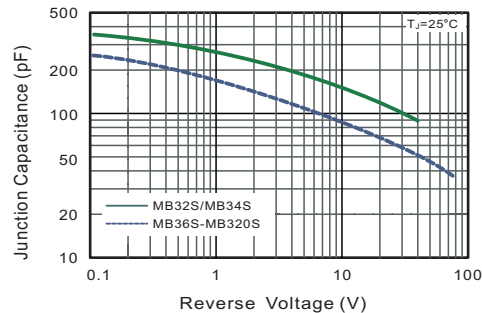


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

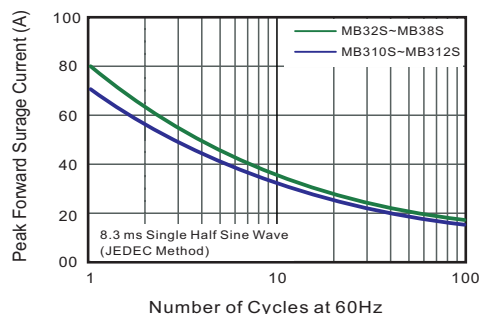
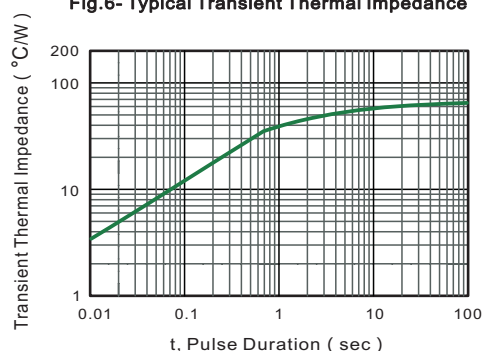
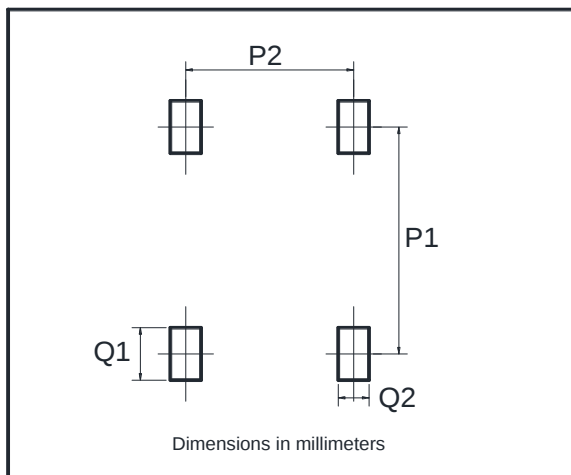


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20