

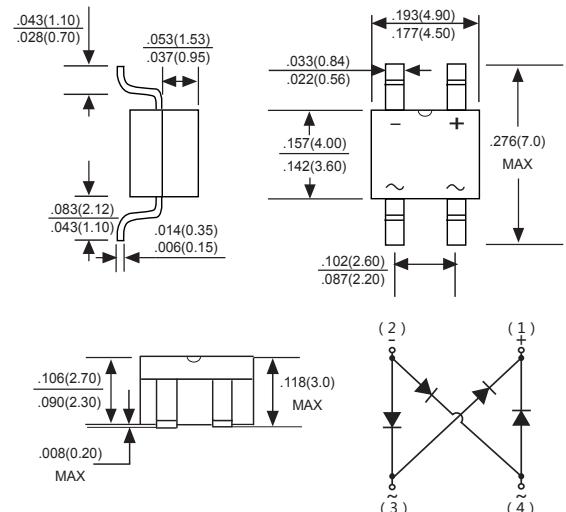


## Schottky Surface Mount Flat Bridge Rectifier

### Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability

MBS



### 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 MB24S	MDD MB26S	MDD MB28S	MDD MB210S	MDD MB220S	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	60	80	100	200	V
Maximum RMS voltage	V <sub>RMS</sub>	28	42	56	70	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	40	60	80	100	200	V
Maximum average forward rectified current	I <sub>F(AV)</sub>			2.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>		50		40		A
Maximum instantaneous forward voltage at 2A	V <sub>F</sub>	0.55	0.70		0.85		V
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage	I <sub>R</sub>	0.5 10			0.3 5		mA
Typical junction capacitance at 4.0V, 1.0MHz	C <sub>j</sub>	220		80			pF
Typical thermal resistance (Note1)	R <sub>θJA</sub>			75			°C/W
Operating temperature range	T <sub>J</sub>			-55 to +125			°C
storage temperature range	T <sub>STG</sub>			-55 to +150			°C

Note: 1. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.



# MB24S THRU MB220S

Voltage Range - 40 to 200 Volts Current - 2.0 Ampere

## Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

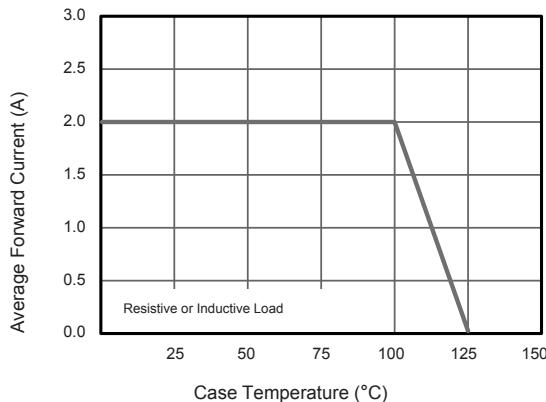


Fig.2 Typical Reverse Characteristics

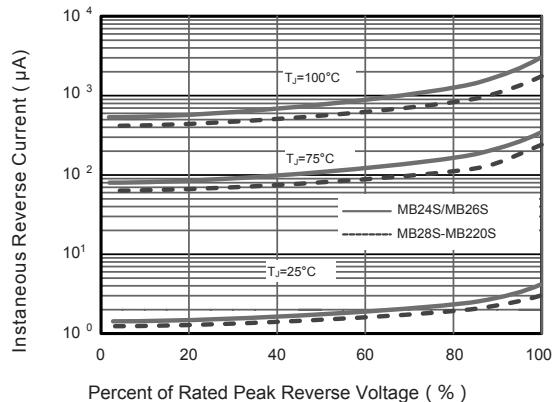


Fig.3 Typical Forward Characteristic

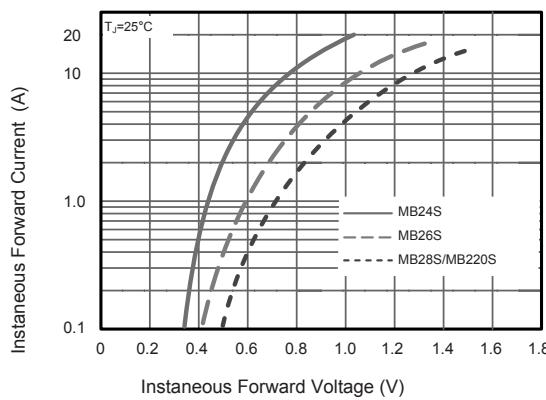


Fig.4 Typical Junction Capacitance

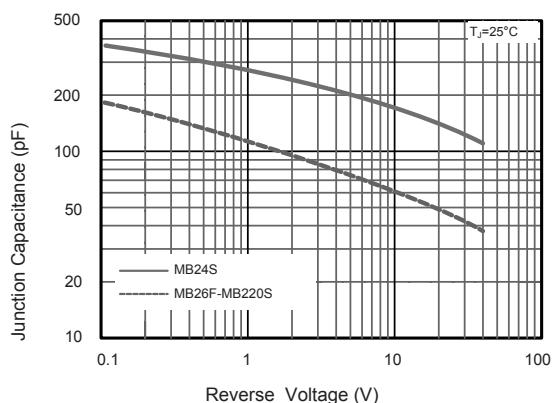


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

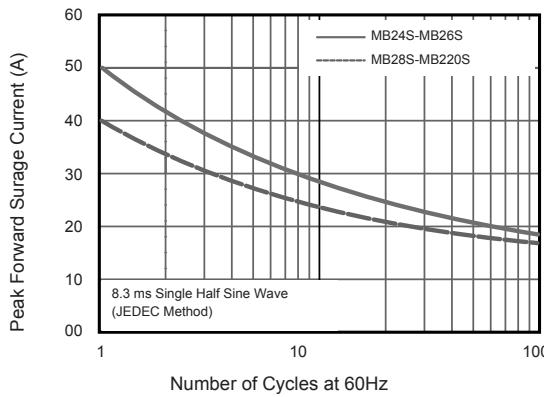
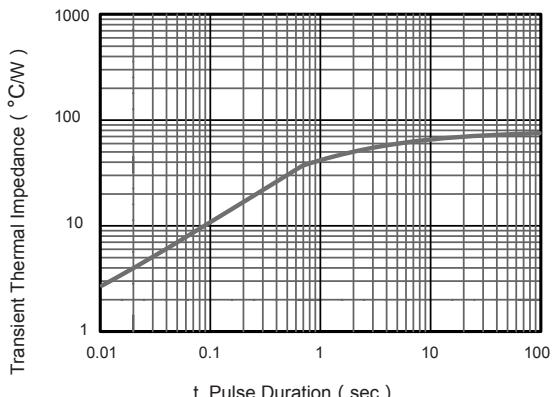
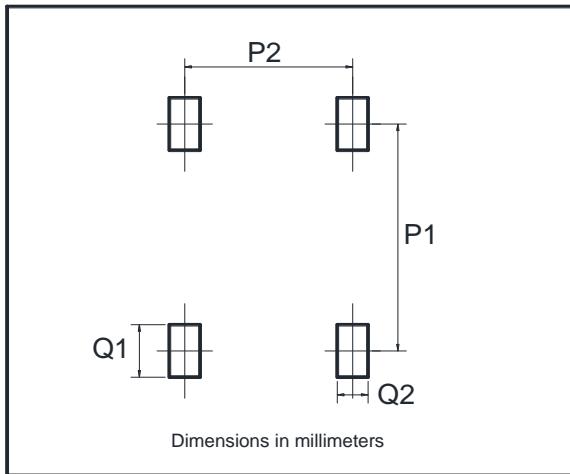


Fig.6 Typical Transient Thermal Impedance



The curve above is for reference only.

## Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20