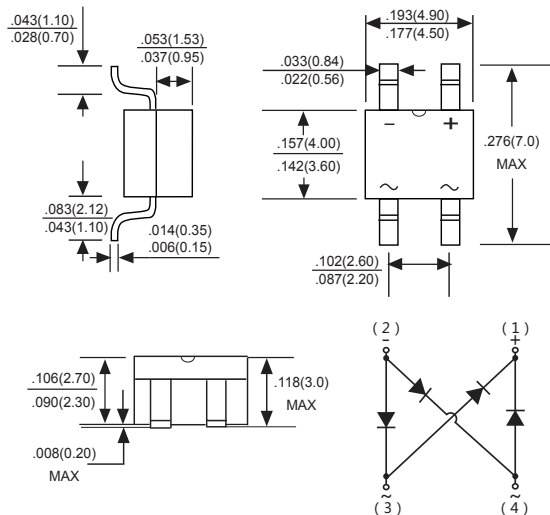


Schottky Surface Mount Flat Bridge Rectifier

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



Dimensions in inches and (millimeters)

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

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	MDD	MDD	MDD	MDD	UNITS	
		MB14S	MB16S	MB18S	MB110S	MB120S		
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	$I_{F(AV)}$	1.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40		30				A
Maximum instantaneous forward voltage at 1A	V_F	0.55	0.70	0.85		0.90	V	
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	0.3 10		0.2 5		0.1 2	mA	
Typical junction capacitance at 4.0V, 1.0MHz	C_j	110	80					pF
Typical thermal resistance (Note1)	$R_{\theta JA}$	100						°C/W
Operating temperature range	T_J	-55 to +125						°C
storage temperature range	T_{STG}	-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.

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

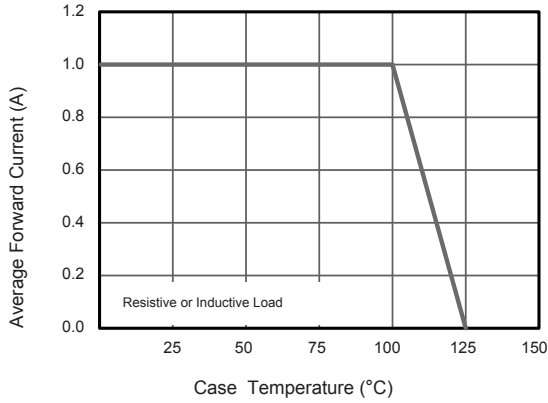


Fig.2 Typical Reverse Characteristics

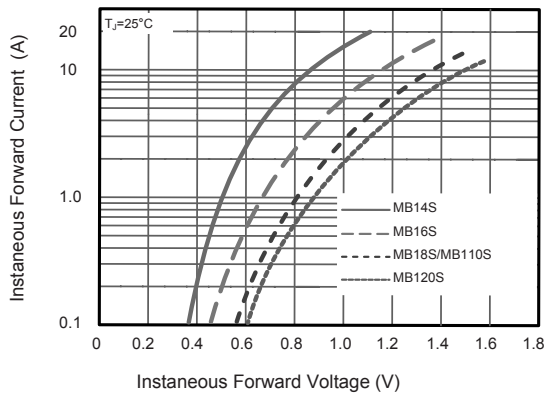
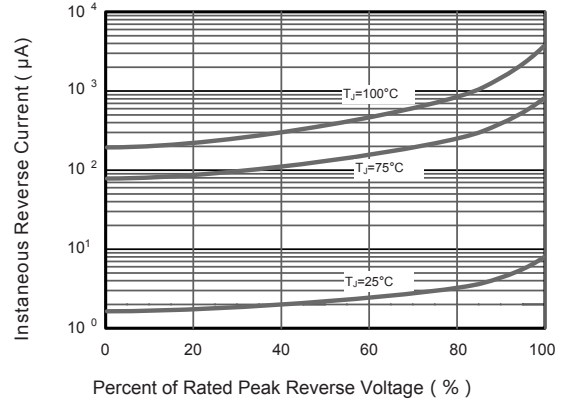


Fig.4 Typical Junction Capacitance

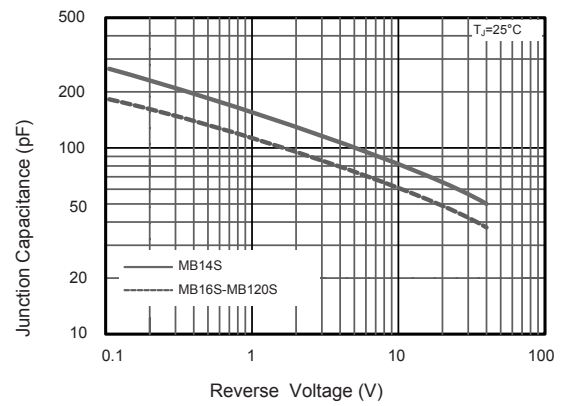


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

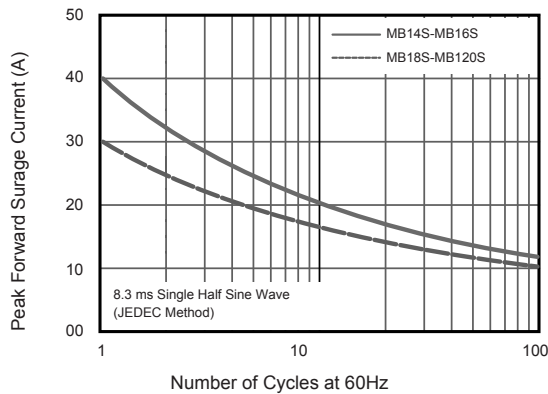
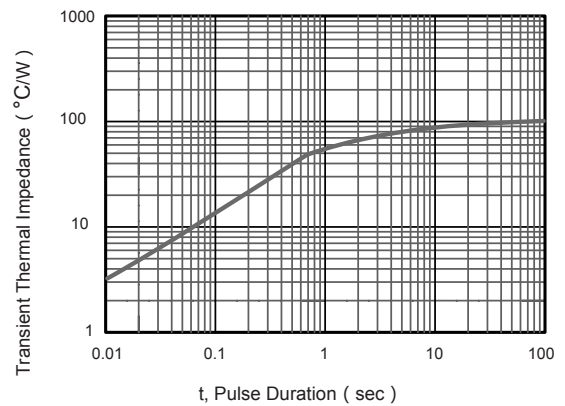
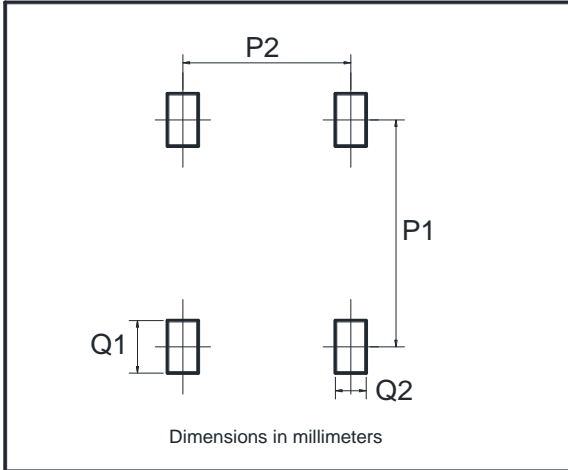


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20