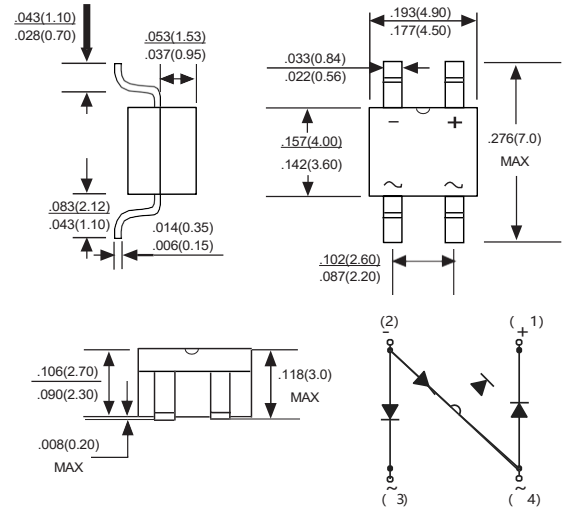


Schottky Surface Mount Flat Bridge Rectifier

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



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	MB14S	MB16S	MB18S	MB110S	MB120S	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)}	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 T _A =25°C at rated DC blocking voltage T _A =100°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)	RθJA	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

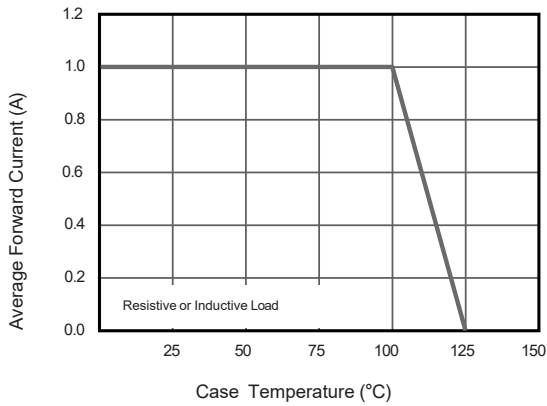


Fig.2 Typical Reverse Characteristics

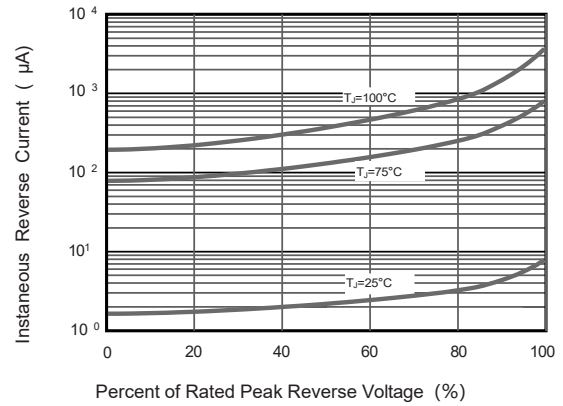


Fig.4 Typical Junction Capacitance

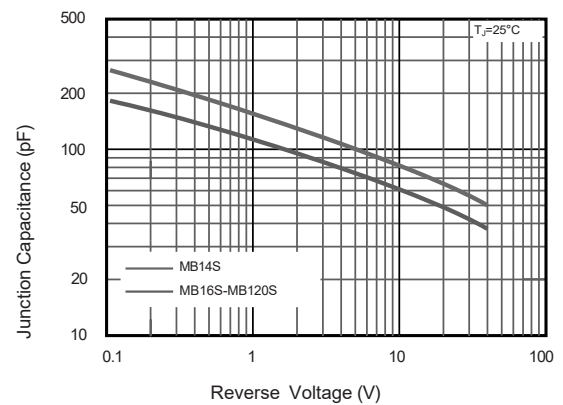


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

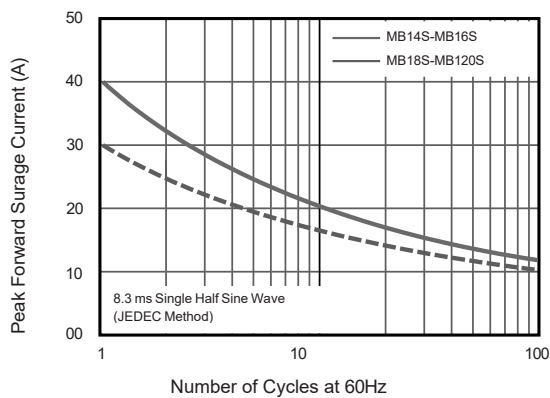
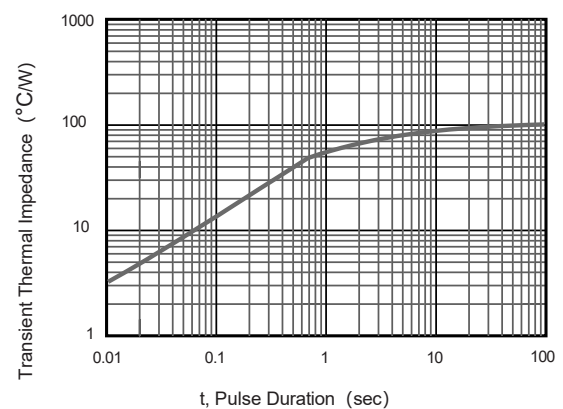
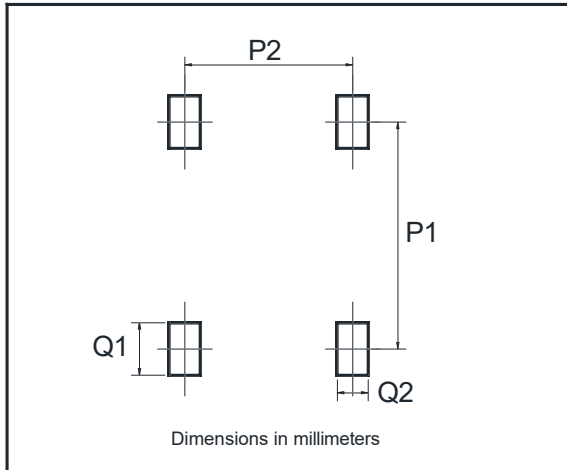


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20