

1.0Amp Schottky Barrier Rectifiers
FEATURES :

- High current capability
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- RoHS compliant.

MECHANICAL DATA :

- Case : Molded plastic, MBS
- Terminals : Terminals :Plated terminals solderable per MIL-STD-202E method 208C
- Polarity : Marked on body.


MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)

Characteristic	Symbol	MB 12S	MB 14S	MB 15S	MB 16S	MB 18S	MB 110S	MB 115S	MB 120S	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0								A
Peak Forward surge current 8.3ms single half-sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30								A
Maximum Forward Voltage at 1.0A DC and 25°C	V_F	0.55	0.70	0.85	0.95					V
Maximum DC reverse current at rated DC blocking voltage ($T_A=25^\circ\text{C}$ / $T_A=100^\circ\text{C}$)	I_R	0.5 / 10								mA
Typical Junction Capacitance ⁽¹⁾	C_J	110								pF
Typical Thermal Resistance	$R_{\theta JA}$	50								°C/W
Operating Junction Temperature Range	T_J	-55 ~ +150								°C
Storage Temperature Range	T_{STG}	-55 ~ +150								°C

Note 1 : Measured at 1 MHz and applied reverse voltage of 4.0 VDC

TYPICAL RATINGS AND CHARACTERISTICS CURVES

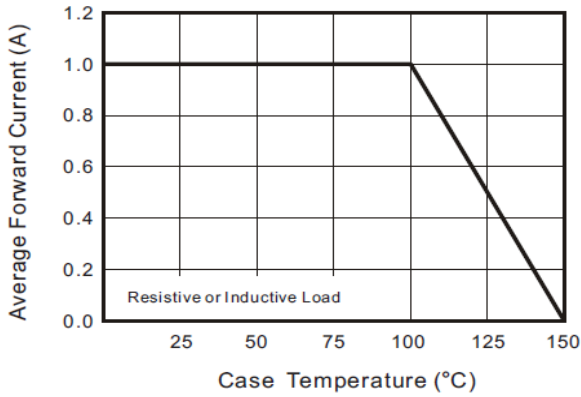


Figure 1. FORWARD CURRENT DERATING CURVE

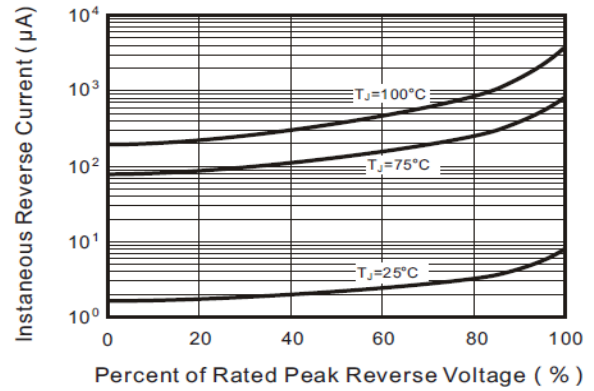


Figure 2. TYPICAL REVERSE CHARACTERISTICS

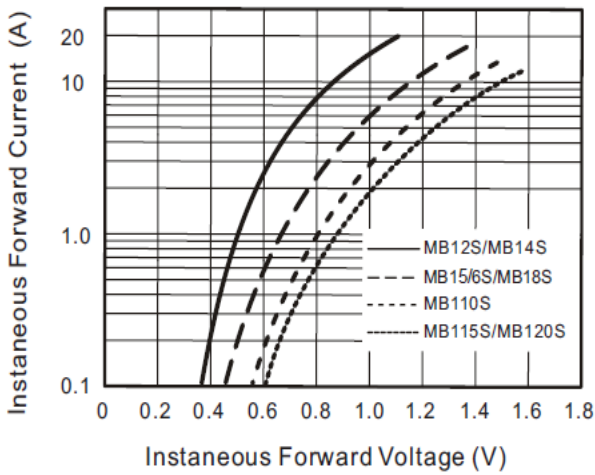


Figure 3. TYPICAL FORWARD CHARACTERISTICS

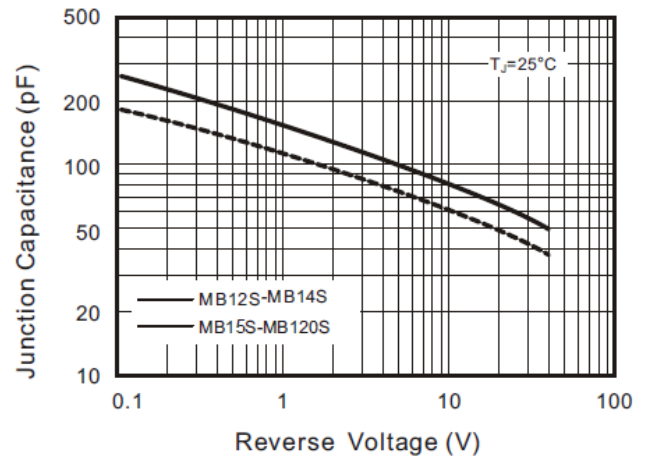


Figure 4. TYPICAL JUNCTION CAPACITANCE

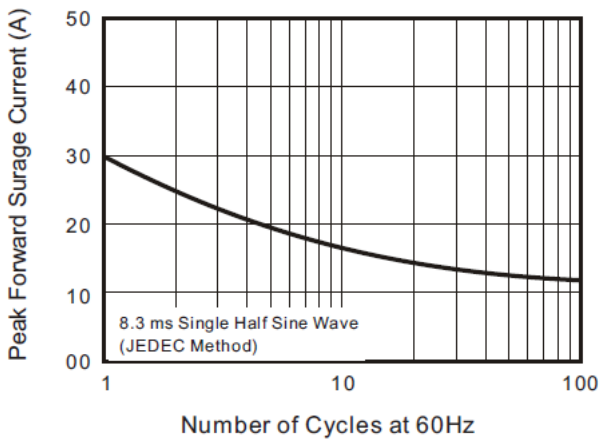


Figure 5. MAXIMUM NON-REPETITIVE PECK FORWARD SURGE CURRENT

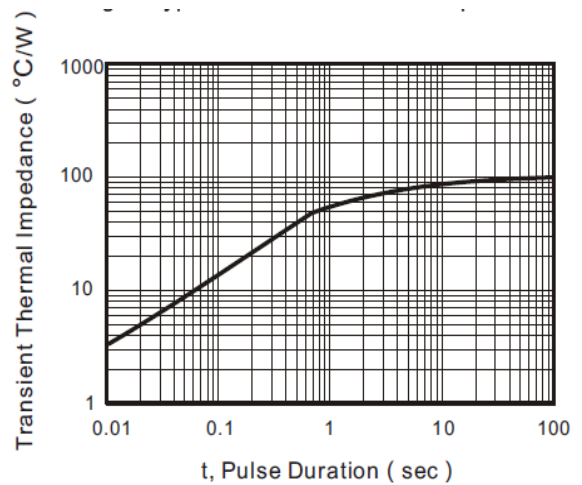
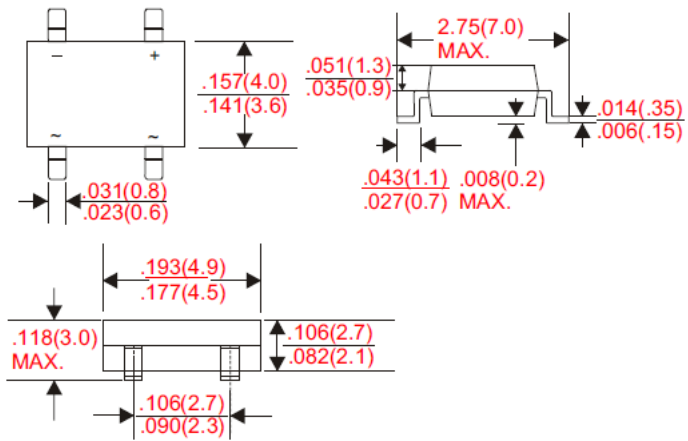


Figure 6. TYPICAL TRANSIENT THERMAL IMPEDANCE

- Package outlines : Dimensions in millimeters



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