



**Surface Mount Schottky Bridge Rectifier**  
**Reverse Voltage 20 to 100 Volts Forward Current 1.0 Ampere**

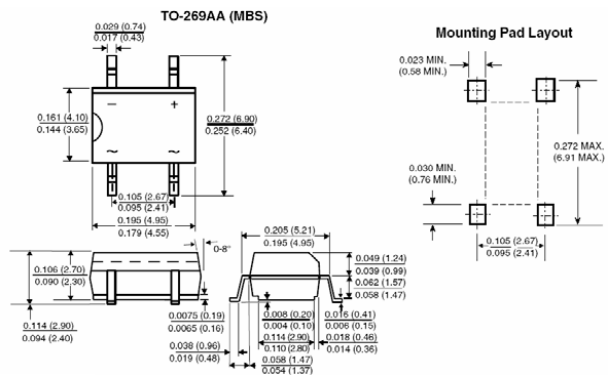
**Features**

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High surge overload rating:30A peak
- ◆ Saves space on printed circuit boards
- ◆ High temperature soldering guaranteed:260°C/10 seconds



**Mechanical Data**

- ◆ Case:Molded plastic body over passivated junctions
- ◆ Terminals: plated leads solderable per MIL-STD-750, Method 2026
- ◆ Mounting Position:Any
- ◆ Weight:0.078 oz.,0.22g



**Maximum Ratings & Electrical Characteristics**

(T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	MB12S	MB14S	MB16S	MB18S	MB110S	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	60	80	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	40	60	80	100	V
Maximum Average forward output current	I <sub>F(AV)</sub>	1.0					A
Peak forward surge current 8.3 MS single HALF sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30					A
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	0.50		0.70		0.85	V
Maximum DC reverse current at TA=25°C	I <sub>R</sub>	0.5					mA
rated DC blocking voltage per leg TA=100°C		20					
Typical thermal resistance per leg(Note1)	R <sub>θJA</sub>	88					°C/W
	R <sub>θJL</sub>	28					
Operation junction temperature range	T <sub>J</sub>	-55 to +150					°C
Storage temperature range	T <sub>STG</sub>	-55 to +150					°C

**Notes:** 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2"(5.0x5.0mm) copper pad areas.



### RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Fig.1 Forward Current Derating Curve

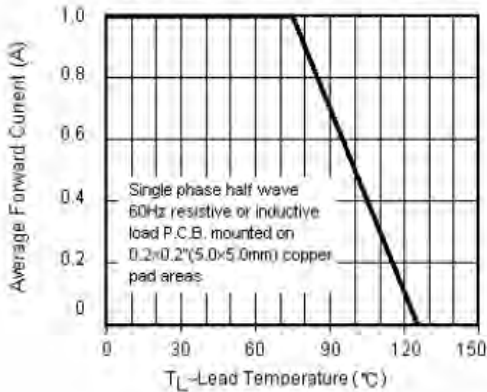


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

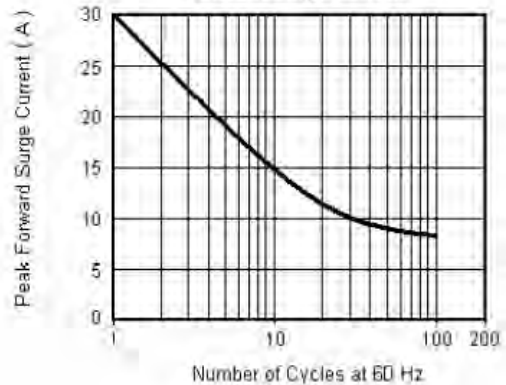


Fig.3 Typical Instantaneous Forward Characteristics

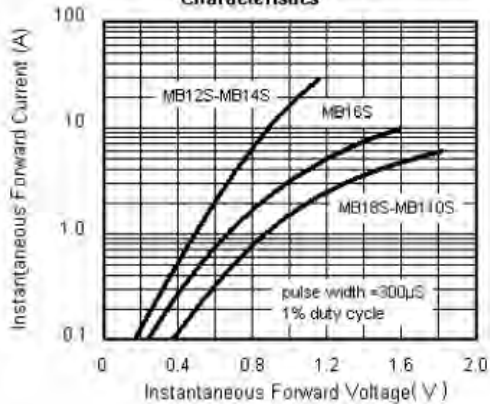


Fig.4 Typical Junction Capacitance

