



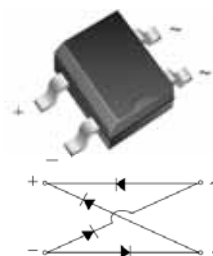
MB12S thru MB110S

Surface Mount Schottky Bridge Rectifier

Reverse Voltage 20 to 100 Volts Forward Current 1.0 Ampere

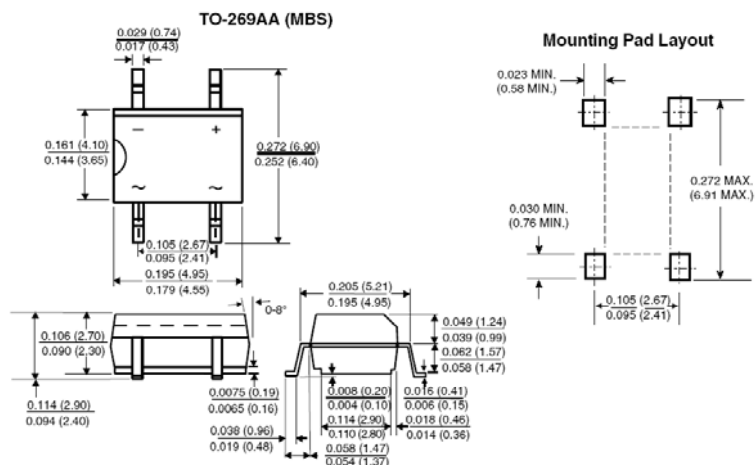
Features

- ◆ 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_A=25°C unless otherwise noted)

Parameter	Symbol	MB12S	MB14S	MB16S	MB18S	MB110S	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	80	100	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	V
Maximum DC blocking voltage	V _{DC}	20	40	60	80	100	V
Maximum Average forward output current	I _{F(AV)}	1.0					A
Peak forward surge current 8.3 MS single HALF sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30					A
Maximum instantaneous forward voltage at 1.0A	V _F	0.50		0.70	0.85		V
Maximum DC reverse current at TA=25°C rated DC blocking voltage per leg TA=100°C	I _R	0.5 20					mA
Typical thermal resistance per leg(Note1)	R _{θJA}	88					°C/W
	R _{θJL}	28					
Operation junction temperzture range	T _j	-55 to +125					°C
Storage temperature range	T _{STG}	-55 to +150					°C

Notes: 1. Thermal resistance form junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas.

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

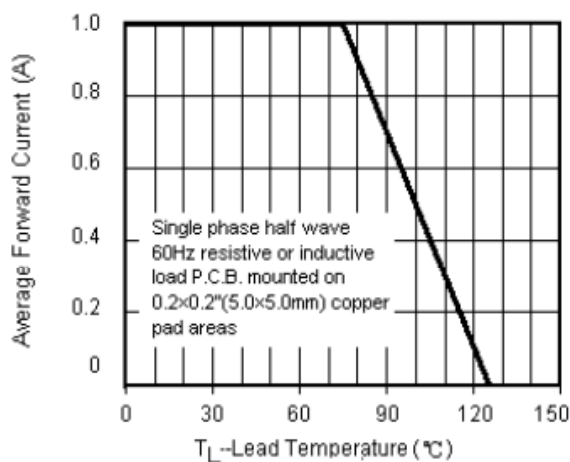


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

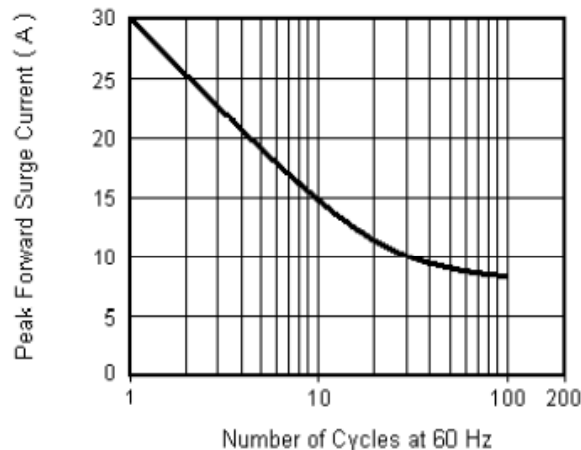


Fig.3 Typical Instantaneous Forward Characteristics

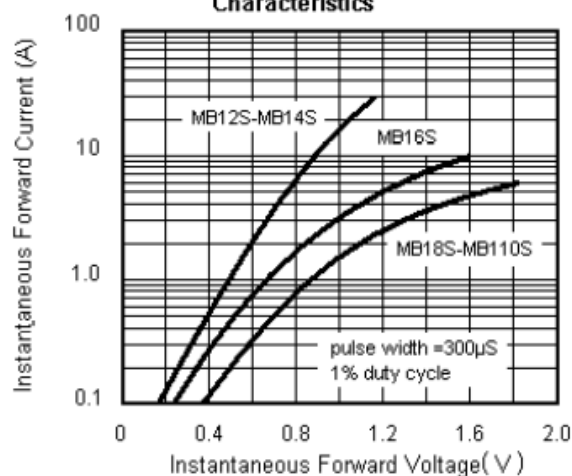


Fig.4 Typical Junction Capacitance

