



MB12S THRU MB110S

SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

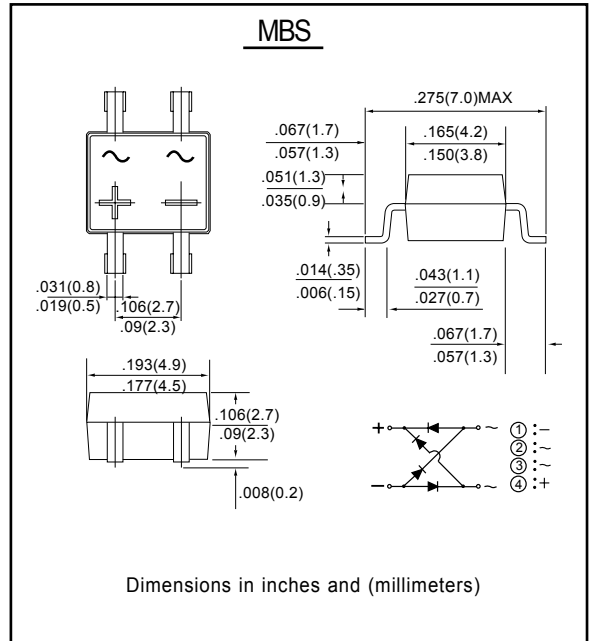
Reverse Voltage - 20 to 100 Volts Forward Current - 1.0 Ampere

FEATURES

- Surge overload rating - 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- Glass passivated device
- Polarity symbols molded on body

MECHANICAL DATA

- Case : MBS, Molded Plastic
- Epoxy : Device has UL flammability classification 94V-0
- Mounting Position : Any
- Weight : 0.22 grams (approx.)
- Marking : Type Number



Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

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
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A
Maximum instantaneous forward voltage at 1.0A	VF	0.50		0.70		0.85	V
Maximum DC reverse current at rated DC blocking voltage per leg	I_R			0.5			mA
Typical thermal resistance per leg(Note1)	$R_{\theta JA}$			88			$^{\circ}\text{C}/\text{W}$
	$R_{\theta JL}$			28			
Operation junction temperature range	T_j			-55 to +150			$^{\circ}\text{C}$
Storage temperature range	T_{STG}			-55 to +150			$^{\circ}\text{C}$

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



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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

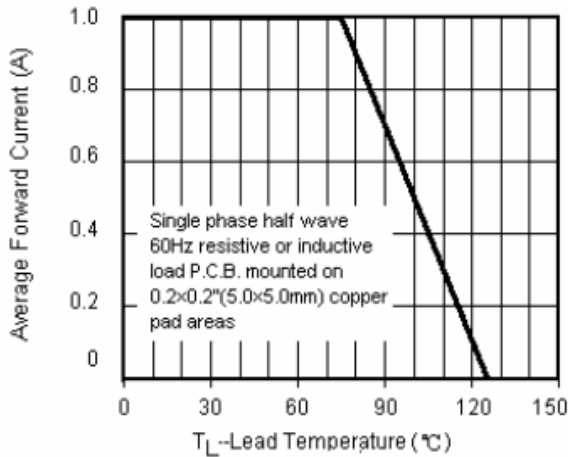


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

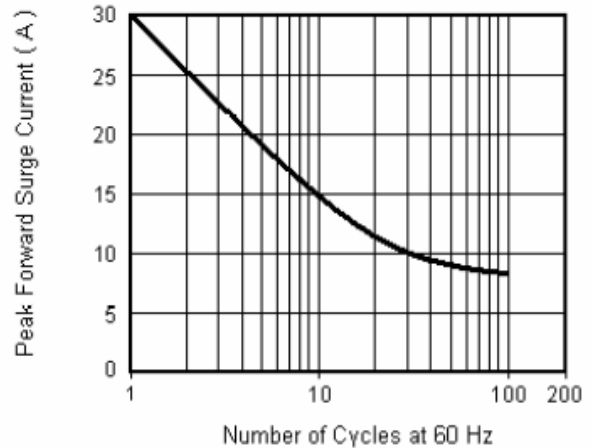


Fig.3 Typical Instantaneous Forward Characteristics

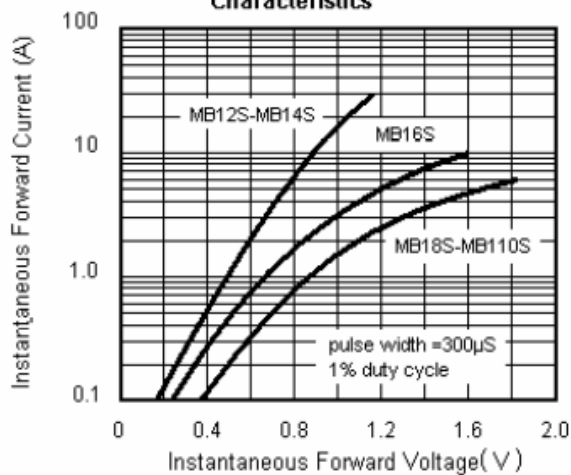


Fig.4 Typical Junction Capacitance

