

MB12S~MB110S Single Phase 1.0 Amp Schottky Barrier Bridge Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

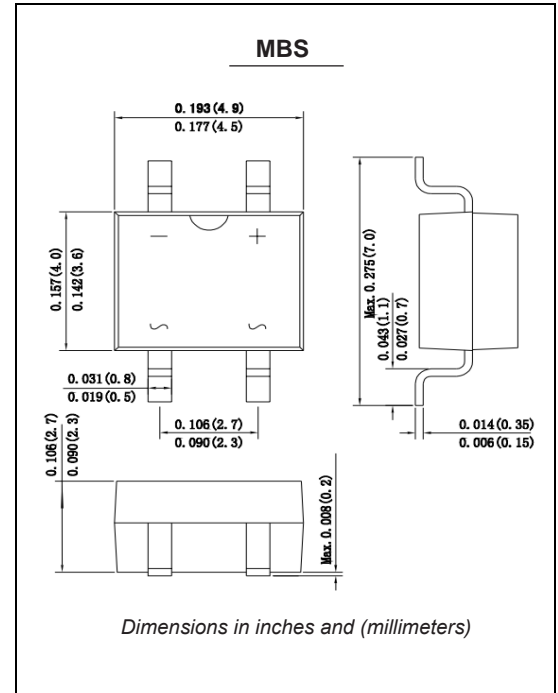
Case: Molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbol marking on body

Mounting Position: Any

Weight : 0.008 ounce, 0.22 grams



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%.

	SYMBOLS	MB12S	MB14S	MB16S	MB18S	MB110S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0					Amps
Maximum instantaneous forward voltage at 1A	V_F	0.55		0.70		0.85	Volts
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 125^\circ C$	I_R	0.5 20					mA
Typical thermal resistance (Note 1)	R_{qJA}	75					$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +155					$^\circ C$

Note: 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

Ratings And Characteristic Curves

MB12S THRU MB110S

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

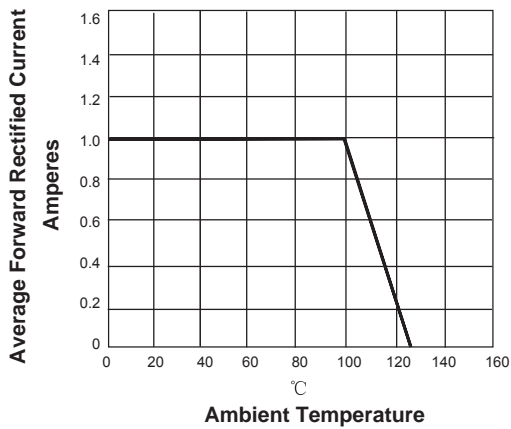


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

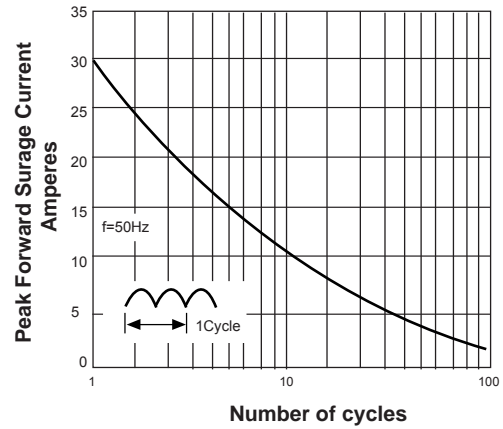


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

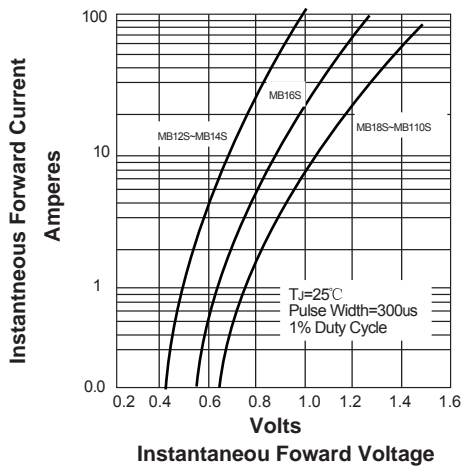


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

