



MB2S THRU MB10S

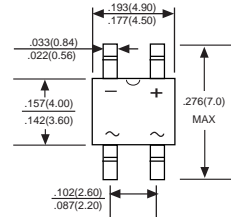
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 1.0 Ampere

FEATURES

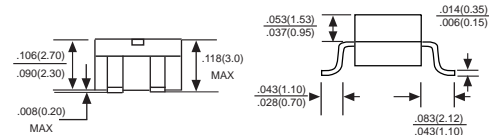
Ideal for printed circuit board
 Reliable low cost construction utilizing
 molded plastic technique
 High temperature soldering guaranteed:
 260°C/10 seconds at 5 lbs., (2.3kg) tension
 Small size, simple installation
 High surge current capability

MBS



MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any
Weight: 0.008 ounce, 0.22 grams



Dimensions in inches and (millimeters)

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 derate current by 20%.

	SYMBOLS	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_A=30^\circ C$	$I_{F(AV)}$	1.0					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					Amps
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.0					Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	I_R	5.0 500					μA μA
Typical junction capacitance per leg (Note3)	C_J	15					pF
Typical thermal resistance per leg On glass-epoxy P.C.B. (Note1) On aluminum substrate (Note2)	$R(\theta)_{JA}$	75					$^\circ C/W$
Operating temperature range	T_J	-55 to +150					$^\circ C$
storage temperature range	T_{STG}	-55 to +150					$^\circ C$

NOTES: 1. On glass epoxy P.C.B. mounted on 0.05x0.05" (1.3x1.3mm) pads
 2. On aluminum substrate P.C.B. with on area of 0.8"x0.8" (20x20mm) mounted on 0.05x0.05" (1.3x1.3mm) solder pad
 3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.



RATINGS AND CHARACTERISTIC CURVES MB2S THRU MB10S

Fig.1 Derating Curve For Output Rectified Current

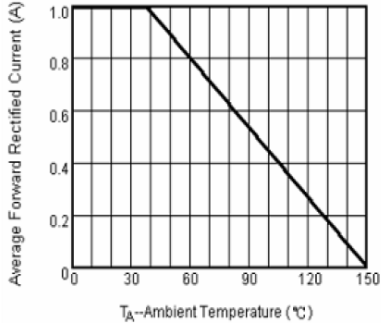


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

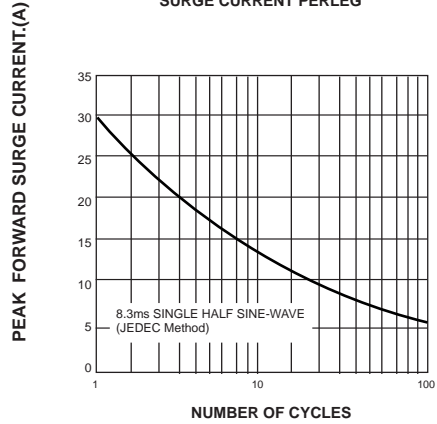


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

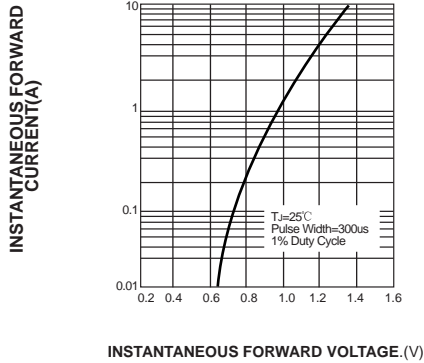


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

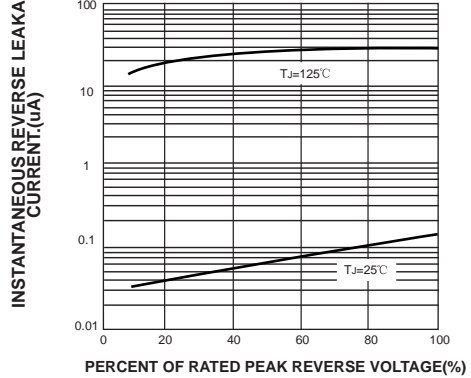


FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG

