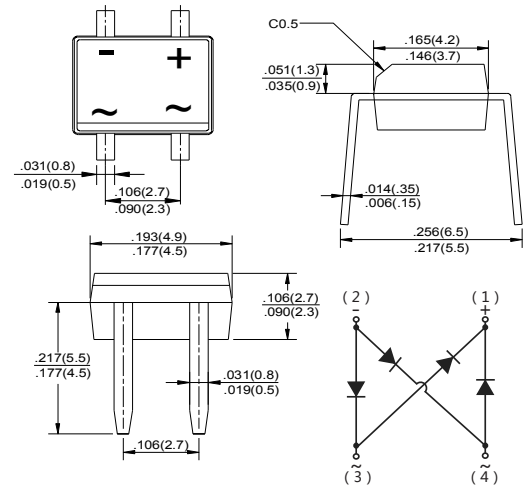


SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

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



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC MBM Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.0044 ounce, 0.125 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%.

MDD Catalog Number	SYMBOLS	MDD MB2M	MDD MB4M	MDD MB6M	MDD MB8M	MDD MB10M	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 $T_c=30^\circ\text{C}$ On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$	0.5			0.8		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 $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5.0			500		μA
Typical junction capacitance per leg (Note 3)	C_J	15					pF
Typical thermal resistance per leg	$R_{(\theta)JA}$	75					$^\circ\text{C}/\text{W}$
Operating temperature range	T_J	-55 to +150					$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150					$^\circ\text{C}$

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

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR

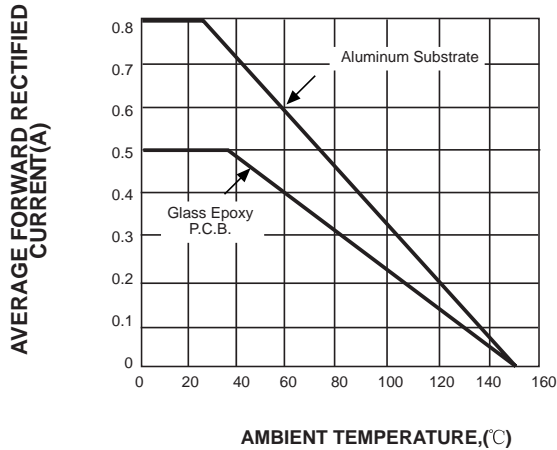


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

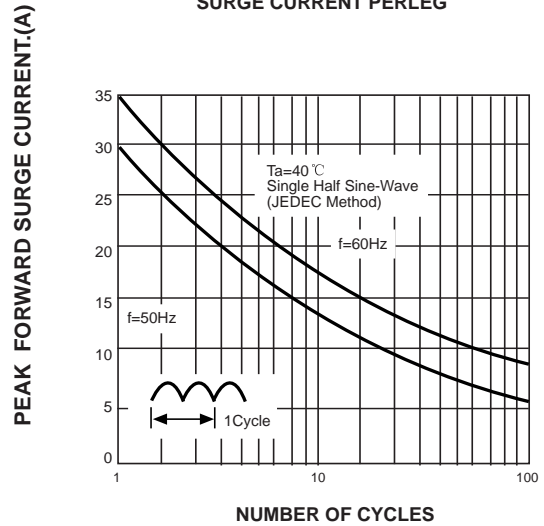


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

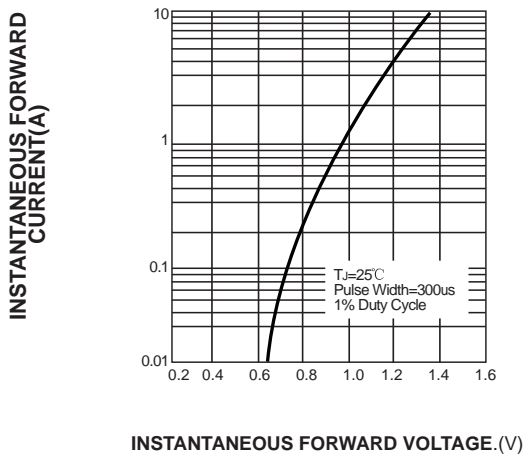


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

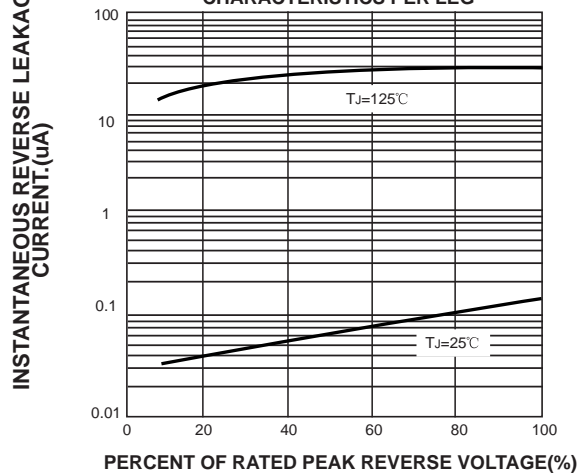
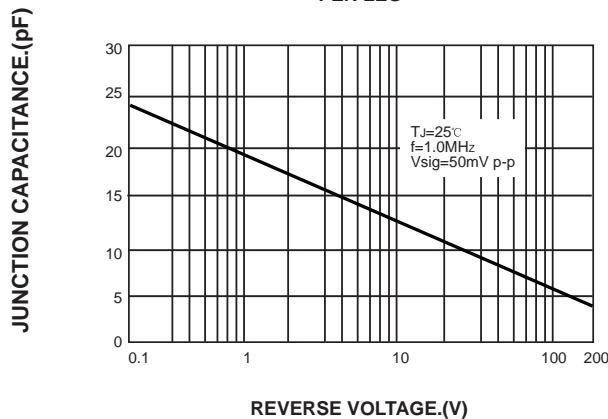


FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG



The curve above is for reference only.