



MB05F THRU MB10F

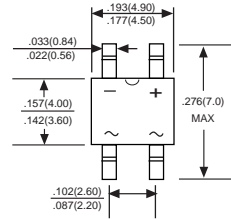
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 50 to 1000 Volts Current - 1.0 Ampere

FEATURES

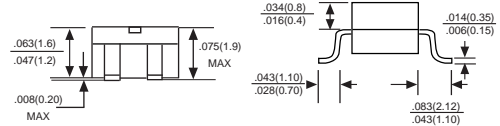
Ideal for printed circuit board
 Reliable low cost construction utilizing
 molded plastic technique
 High temperature soldering guaranteed:
 260°C/10 seconds at 5 lbs., (2.3kg) tension
 Small size, simple installation
 High surge current capability

MBF



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: 0.005 ounce, 0.14 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	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_A=30^\circ\text{C}$	$I_{F(AV)}$	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 0.5A	V_F	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$	I_R	5.0							μA
$T_A=125^\circ\text{C}$		100							μA
Typical junction capacitance per leg(Note3)	C_J	13							pF
Typical thermal resistance per leg On glass-epoxy P.C.B. (Note1) On aluminum substrate (Note2)	$R_{\theta JA}$	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 MB05F THRU MB10F

Fig.1 Derating Curve For Output Rectified Current

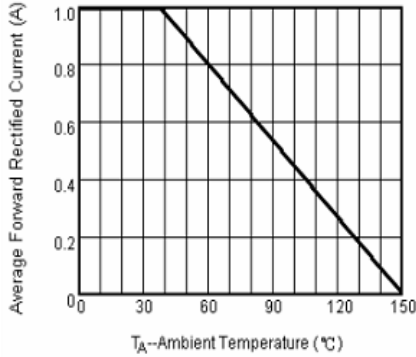


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

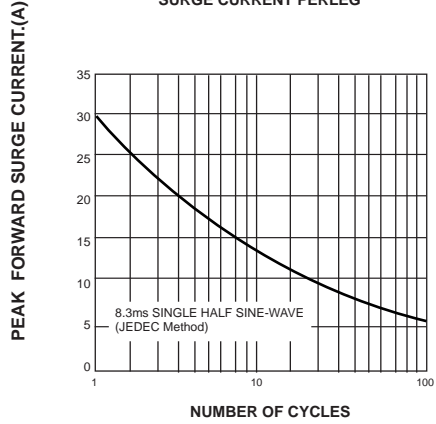


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

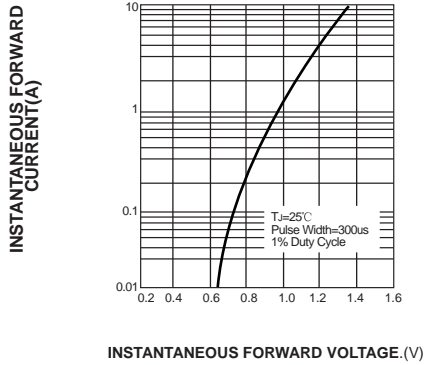


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

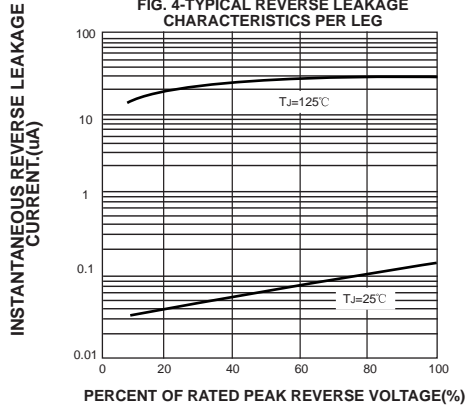


FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG

