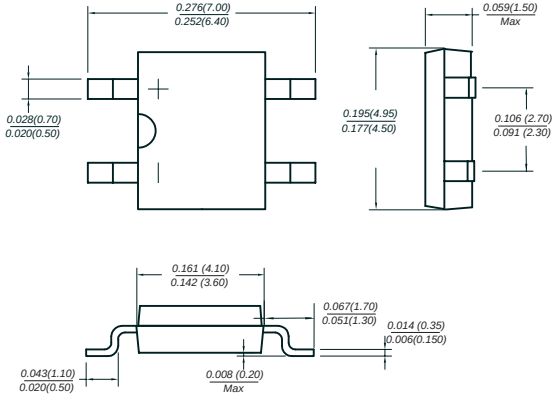
Voltage Range - 200 to 1000 Volts Current - 0.5/0.8/1.0 Ampere

MBF



Dimensions in inches and (millimeters)

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
- Green compound(halogen&Sb_2O_3 free)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load, for capacitive load derate current by 20%.

	SYMBOLS	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B. (Note1) On aluminum substrate (Note2)	$I_{F(AV)}$	0.5 0.8 1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30					A
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.0					V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 500					uA uA
Typical junction capactiance per leg(Note3)	C_J	13					pF
Typical thermal resistance per leg	$R\theta_{JA}$	88					℃/W
Operating temperature range	T_J	-55 to +150					℃
storage temperature range	T_{STG}	-55 to +150					℃

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 an 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 MBF SERIES

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR

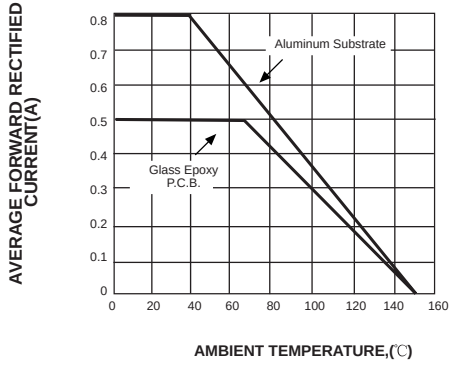


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

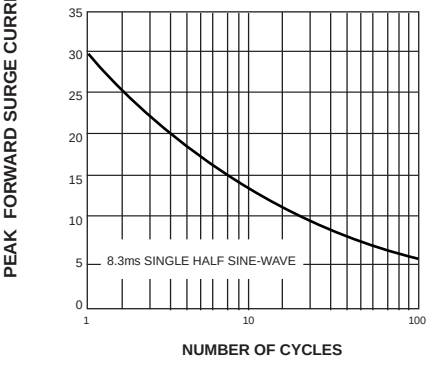


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

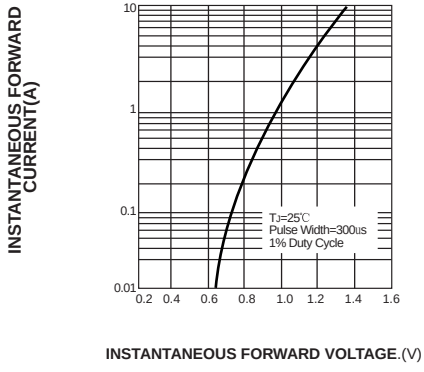


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

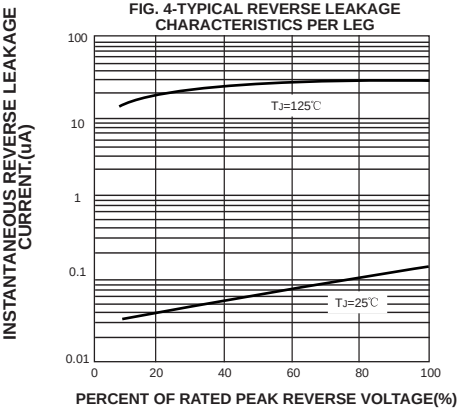


FIG. 5-TYPICAL JUNCTION CAPACTITANE PER LEG