

FEATURES

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

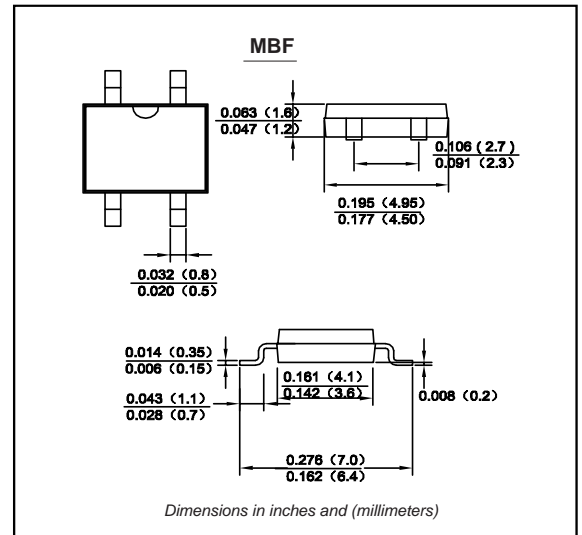
MECHANICAL DATA

Case: MBF, molded plastic

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°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

MDD Catalog Number	SYMBOLS	MB2F	MB4F	MB6F	MB8F	MB10F	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 $T_c=30^\circ C$	$I_{F(AV)}$	0.5					Amps
On glass-epoxy P.C.B. On aluminum substrate		0.8					
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	1.1					Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0					μA
$T_J=25^\circ C$ $T_J=125^\circ C$		500					μA
Typical junction capacitance per leg (Note3)	C_J	13					pF
Typical thermal resistance per leg	$R_{\theta JA}$	60					$^\circ C/W$
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.

Fig. 1 Output Current Derating Curve

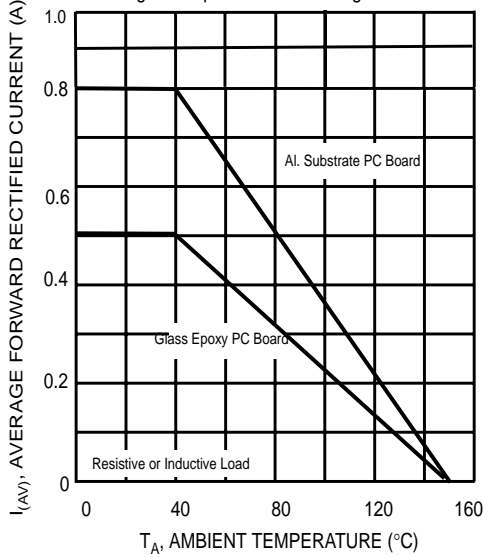


Fig. 2 Typical Forward Characteristics (per leg)

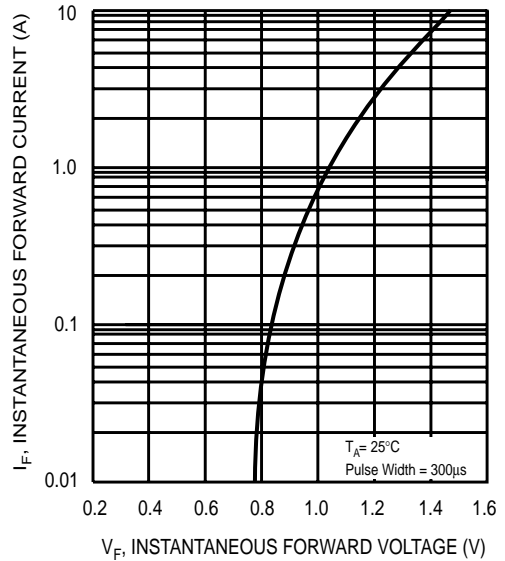


Fig. 3 Maximum Peak Forward Surge Current (per leg)

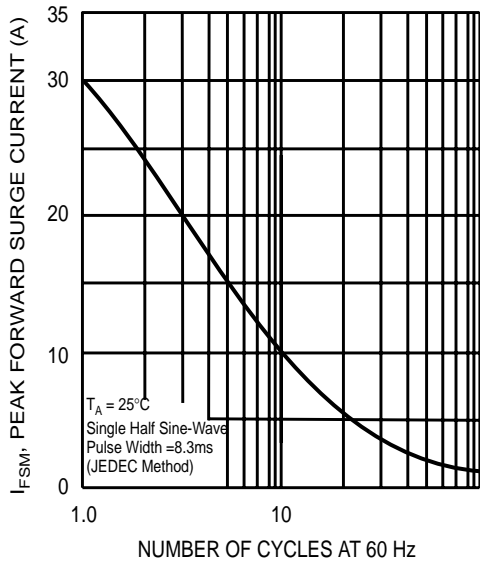


Fig. 4 Typical Junction Capacitance

