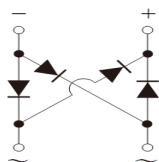
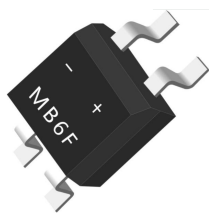



MBF

Features

- Low reverse leakage
- Glass passivated junction
- High forward surge current capability
- High efficiency operation
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- CASE: MBF Molded Plastic
- Polarity: Polarity symbol marking on body
- Mounting position: ANY
- Weight: 0.0027 ounces, 0.078 gram

Maximum Ratings & 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%.)

Parameter	SYMBOLS	MB6F	MB10F	UNITS
	MARKING	MB6F	MB10F	
Maximum repetitive peak reverse voltage	V_{RRM}	600	1000	V
Maximum RMS voltage	V_{RMS}	420	700	V
Maximum DC blocking voltage	V_{DC}	600	1000	V
Maximum average forward rectified current at $T_L=100\text{ C}$ On glass-epoxy P.C.B (Note 1)	$I_{(AV)}$	0.8		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0		A
Maximum instantaneous forward voltage at 1.0A	V_F	1.10		V
Maximum DC reverse current $T_A=25\text{ C}$ at rated DC blocking voltage $T_A=125\text{ C}$	I_R	10 500		$\mu\text{ A}$
Rating for fusing ($t=8.3\text{ms}$, $T_a=25\text{ }^\circ\text{C}$)	I_t^2	3.74		A^2s
Typical junction capacitance (Note2)	C_J	18.0		pF
Typical thermal resistance	R_{qJA}	65.0		C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150		C

Note: 1. Mounted on glass epoxy PC board with 1.3*1.3mm solder pad
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
MBF	Tape/Reel, 13" reel	5000	EIA-481-1



Ratings and Characteristic Curves

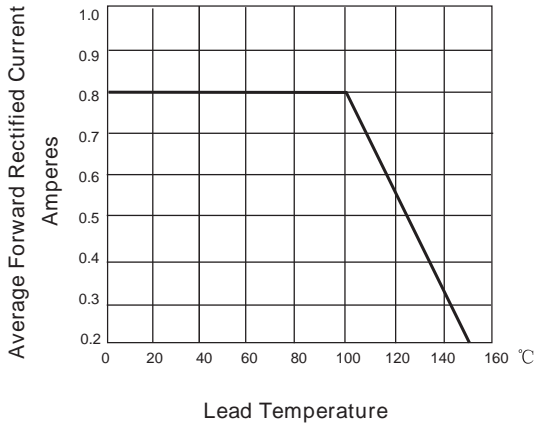


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

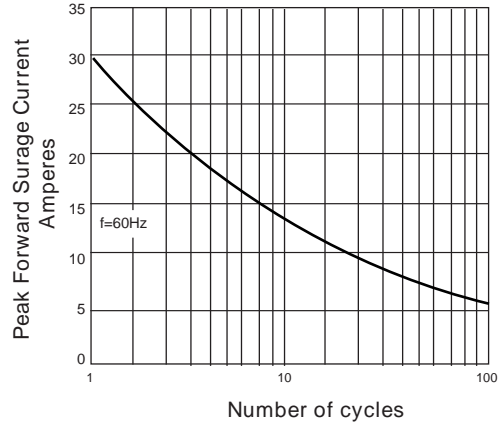


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

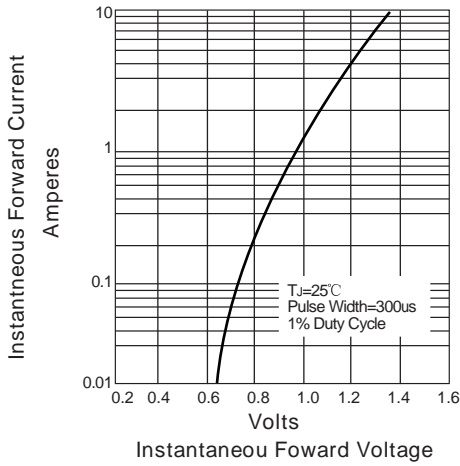


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

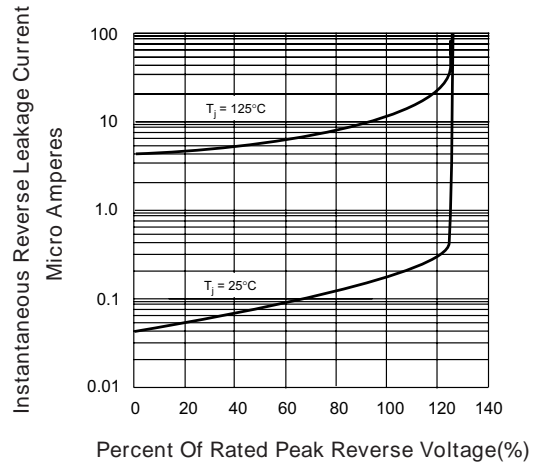
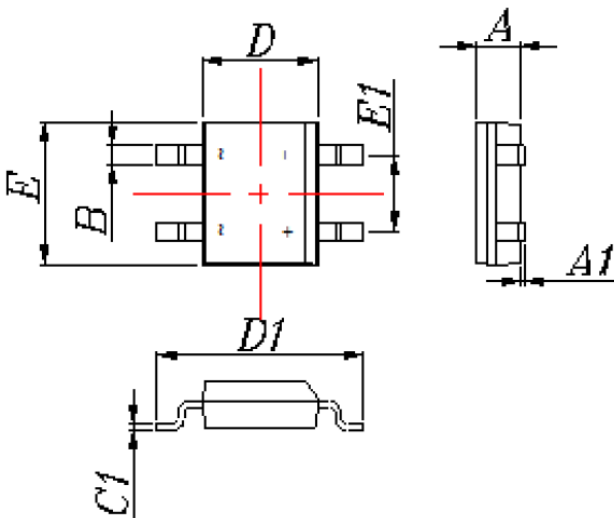


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Package Outline Dimensions: MBF



Symbol	Min.	Max.
A	1.30	1.50
A1	--	0.2
B	0.50	0.70
C1	0.15	0.30
D	3.70	3.90
D1	6.70	6.90
E	4.70	4.90
E1	2.45	2.55