

MB01F THRU MB10F

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.0 Ampere

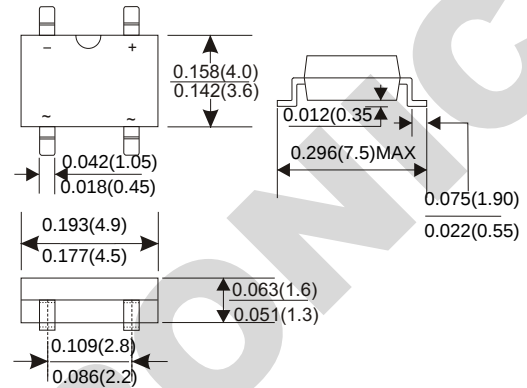
Features

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds at terminals

Mechanical Data

- Case: Molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Molded on body
- LeadP: Plated terminals solderable per MIL-STD-202E method 208C
- Weight: 0.003 ounce, 0.1 gram

MBF



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%

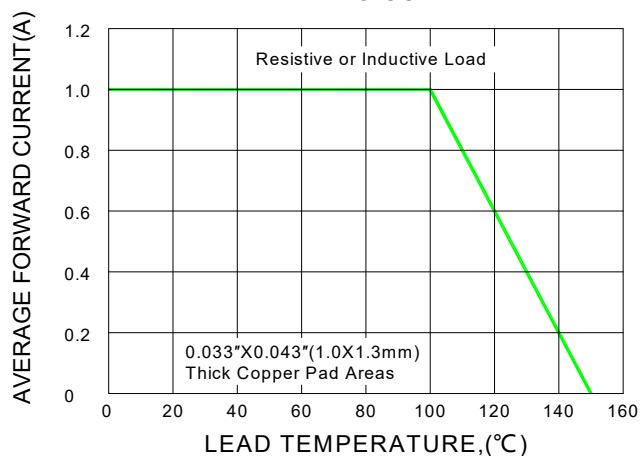
TYPE NUMBER		SYMBOLS	MB 01F	MB 02F	MB 03F	MB 04F	MB ⁰ 06F	MB 08F	MB 10F	UNIT
Maximum Reverse Peak Repetitive Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at T _A =40°C		I _(AV)	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)		I _{FSM}	30							Amps
Peak Forward Surge Current 1.0ms single half sine wave superimposed on rated load (JEDEC Method)			60							
Rating for Fusing (t<8.3ms)		I ² t	3.7							A ² s
Maximum Instantaneous Forward Voltage drop Per Bridge element 1.0A		V _F	1.1							Volts
Maximum Reverse Current at rated DC blocking voltage per element	T _A =25°C	I _R	5							µAmps
	T _A =125°C		120							
Typical Junction Capacitance (NOTE 1)		C _J	13							pF
Typical Thermal Resistance (NOTE 2)		R _{ΘJA}	80							°C/W
Operating and Storage Temperature Range		T _J , T _{STG}	(-55 to +150)							°C

Notes:

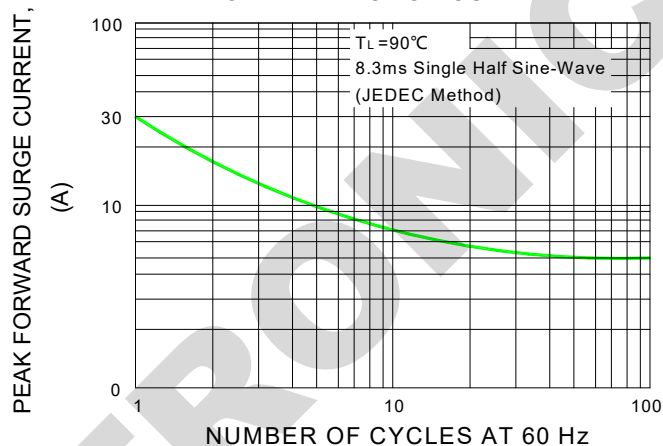
1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C.B. with 0.033"x0.043"(1.00mm×1.30mm) copper pads.

Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

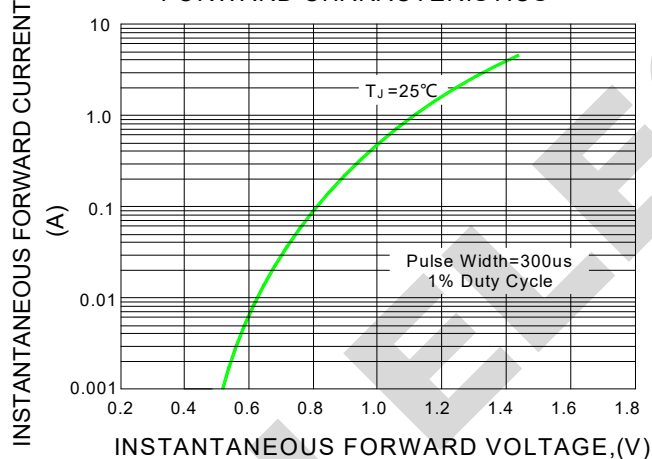
F1G.1-FORWARD CURRENT DERATING CURVE



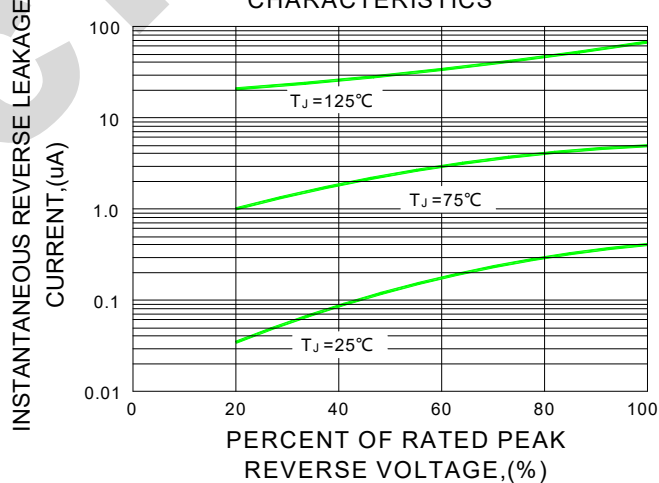
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE

