



MB1M THRU MB10M

MINI SILICON SURFACE MOUNT BRIDGE RECTIFIER

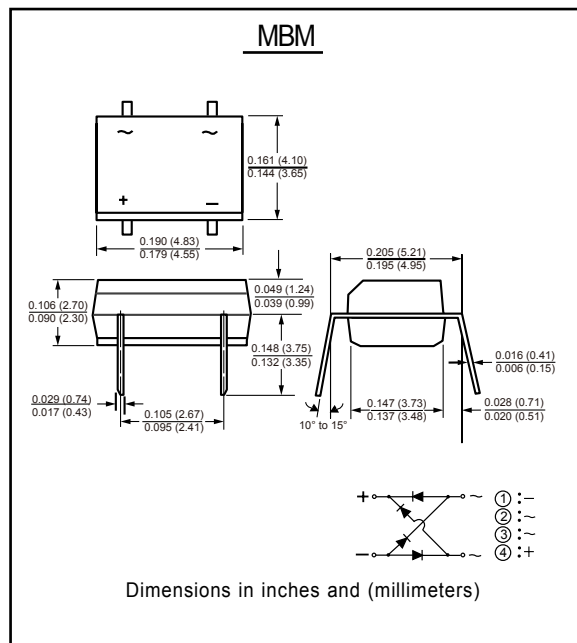
Reverse Voltage - 100 to 1000 Volts Forward Current - 0.8 Ampere

FEATURES

- Surge overload rating - 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- Glass passivated device
- Polarity symbols molded on body

MECHANICAL DATA

- Case : MBM, Molded Plastic
- Epoxy : Device has UL flammability classification 94V-0
- Mounting Position : Any
- Weight : 0.22 grams (approx.)
- Marking : Type Number



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 current derate by 20%.

Characteristic	Symbol	MB1M	MB2M	MB4M	MB6M	MB8M	MB10M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T _A = 40°C	I _O	0.8						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30						A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	10						A ² s
Forward Voltage per element @I _F = 0.8A	V _{FM}	1.1						V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _{RM}	5.0 500						μA
Typical Junction Capacitance per leg (Note 2)	C _j	25						pF
Typical Thermal Resistance per leg (Note 1)	R _{θJA} R _{θJL}	85 20						°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150						°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

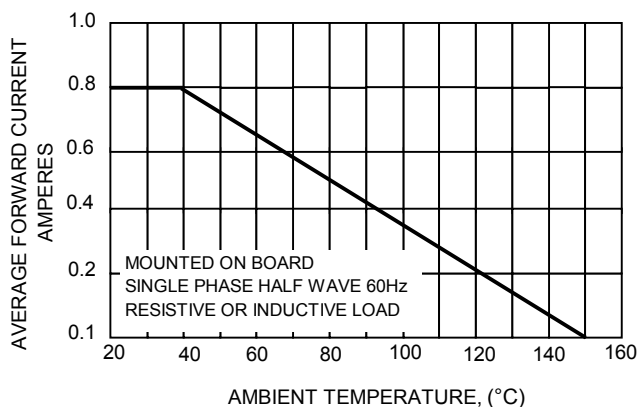


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

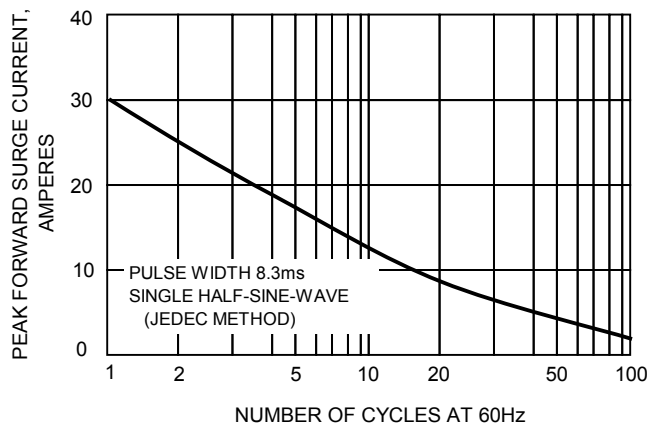


FIG.3-TYPICAL REVERSE CHARACTERISTICS

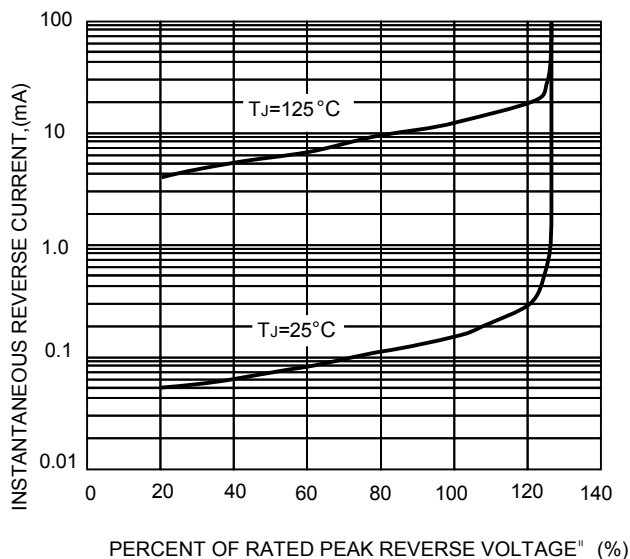


FIG.4-TYPICAL FORWARD CHARACTERISTICS

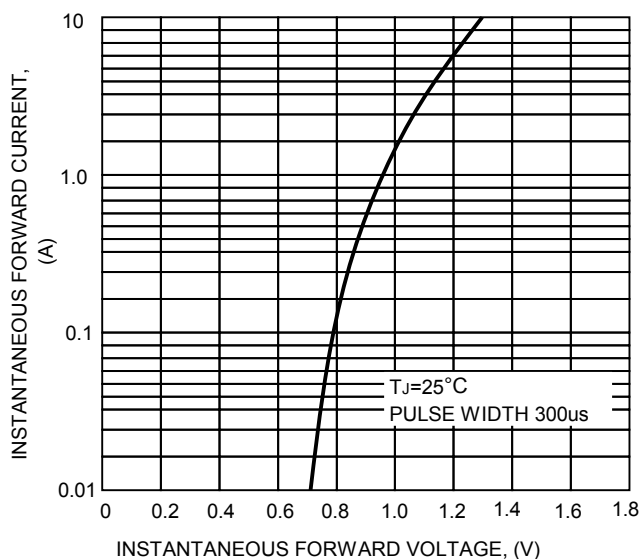


FIG.5-TYPICAL JUNCTION CAPACITANCE

