



PINGWEI ENTERPRISE

## MB2F THRU MB10F

### SINGLE PHASE 1.0AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

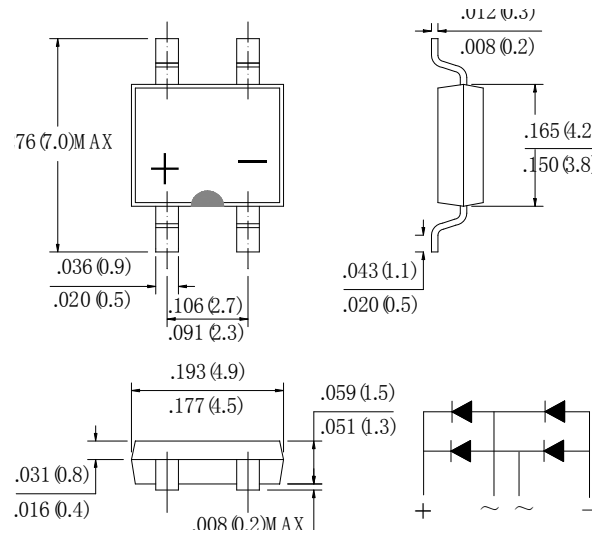
#### FEATURE

- . Glass passivated junction.
- . Ideal for printed circuit board.
- . Reliable low cost construction utilizing molded plastic technique.
- . High surge current capability.
- . High temperature soldering guaranteed: 260°C/10 seconds at terminals.

#### MECHANICAL DATA

- . Case Material: "Green" Molding compound, UL flammability classification rating 94V-0, "Free halogen"
- . Moisture sensitivity level: level 2a, per J-STD-020
- . Polarity: Polarity as marked on the body
- . Weight: 0.105g (approximately)

#### MBF



Dimensions in inches and (millimeters)

#### 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	SYM BOL	MB2F	MB4F	MB6F	MB8F	MB10F	units
Maximum Recurrent 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 @ $T_A=40^\circ\text{C}$	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	30					A
Maximum Instantaneous Forward Voltage @ $I_F=1.0\text{A DC}$ @ $I_F=0.5\text{A DC}$	$V_F$	1.1 0.95					V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$	5.0 100.0					$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	3.74					$\text{A}^2\text{Sec}$
Typical Junction Capacitance Per Leg (Note1)	$C_J$	13					pF
Typical Thermal Resistance (Note2)	$R_{JC}$ $R_{JA}$	25 85					$^\circ\text{C}/\text{W}$
Storage Temperature	$T_{STG}$	-55 to +150					$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-55 to +150					$^\circ\text{C}$

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup> 10x10 mm copper pad per pin with heatsink

# RATING AND CHARACTERISTIC CURVES ( MB2F THRU MB10F )

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

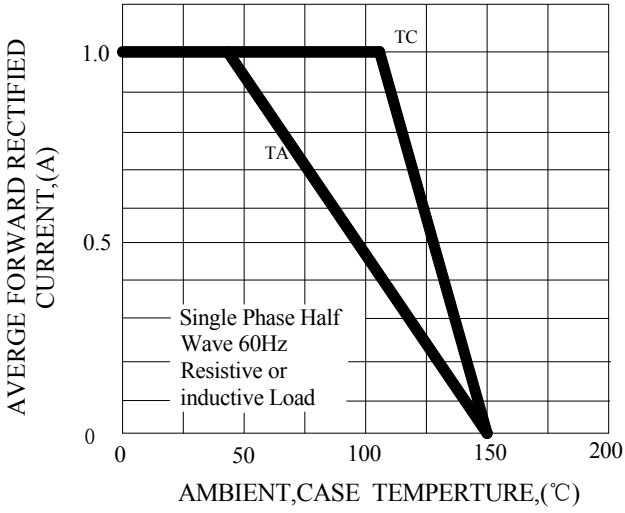


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

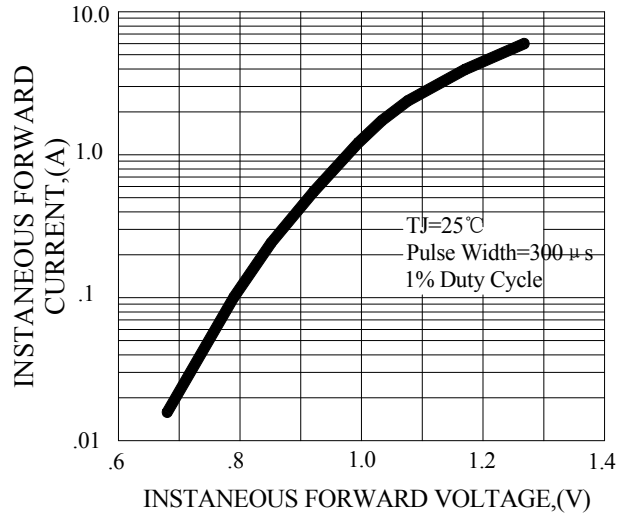


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

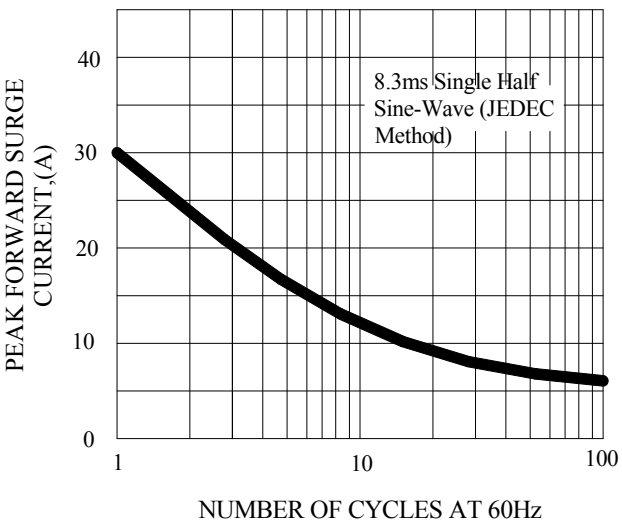


FIG.4-TYPICAL REVERSE CHARACTERISTICS

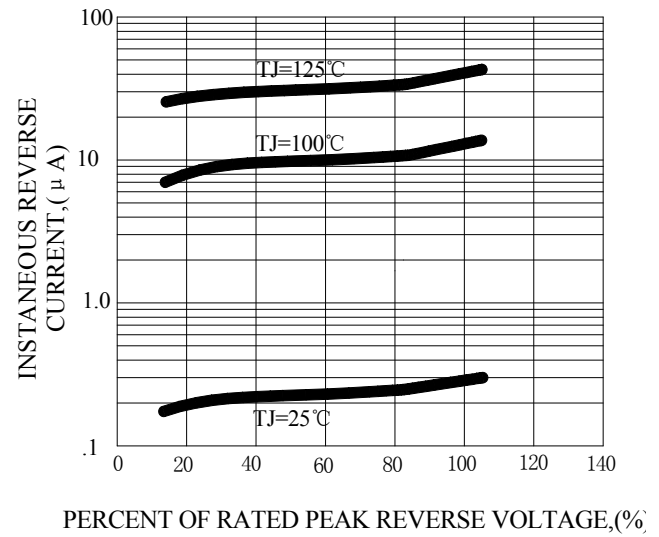


FIG.5-TYPICAL JUNCTION CAPACITANCE

