



MB2S THRU MB10S

PINGWEI ENTERPRISE

SINGLE-PHASE 1.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

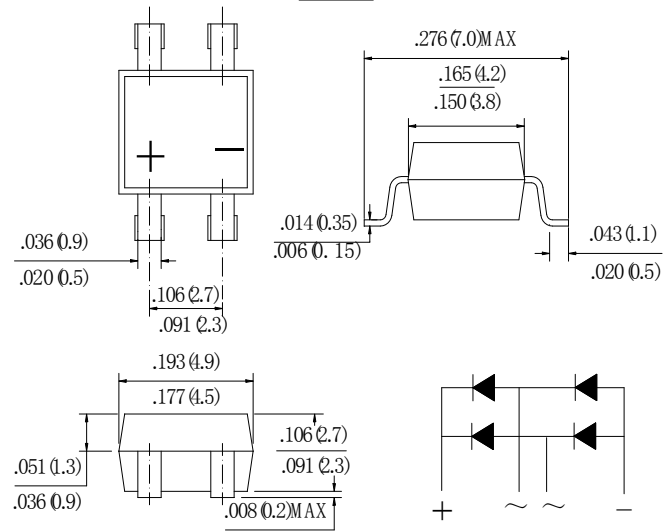
FEATURES

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

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: MIL-STD- 202E, Method 208 guaranteed
- Polarity: Symbols molded or marked on body
- Mounting position: Any
- Weight: 0.125grams

MBS



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	MB2S	MB4S	MB6S	MB8S	MB10S	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 On glass-apoxy P.C.B On aluminum substrate	$I_{F(AV)}$	0.8 1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30					A
Maximum Forward Voltage Drop per element at 0.4A DC	V_F	0.95					V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 125^\circ\text{C}$	I_R	10.0 200.0					μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	3.74					A^2Sec
Typical Junction Capacitance Per Leg(Note1)	C_J	13					pF
Typical Thermal Resistance Per Leg(Note2)	$R_{(JA)}$	85					$^\circ\text{C/W}$
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 from Junction to Ambient mounted on P.C.B with 0.2×0.2" (5×5mm) copper pads

RATING AND CHARACTERISTIC CURVES (MB2S THRU MB10S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

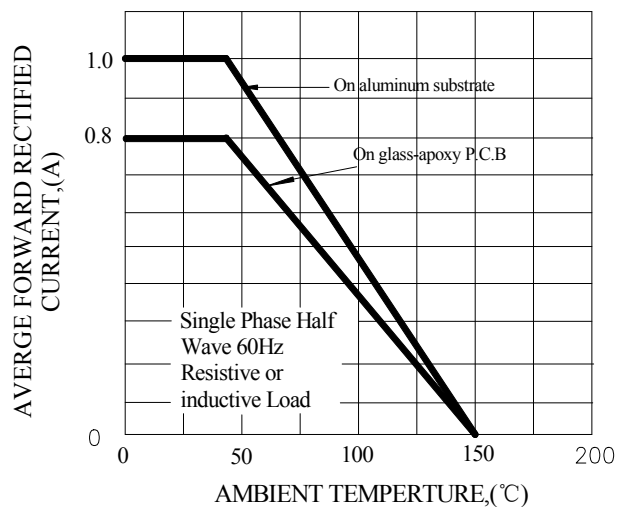


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

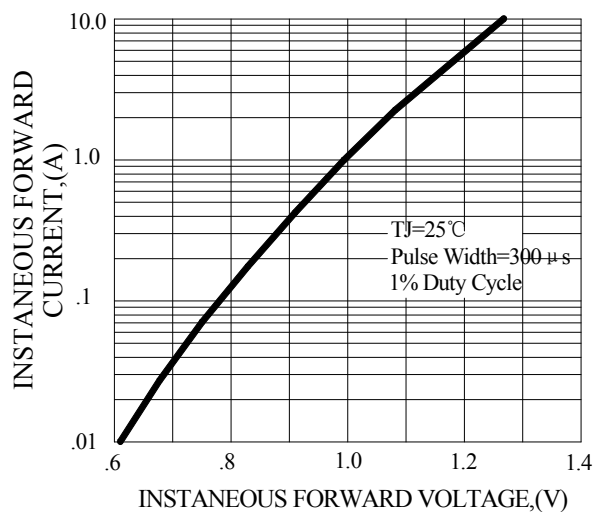


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

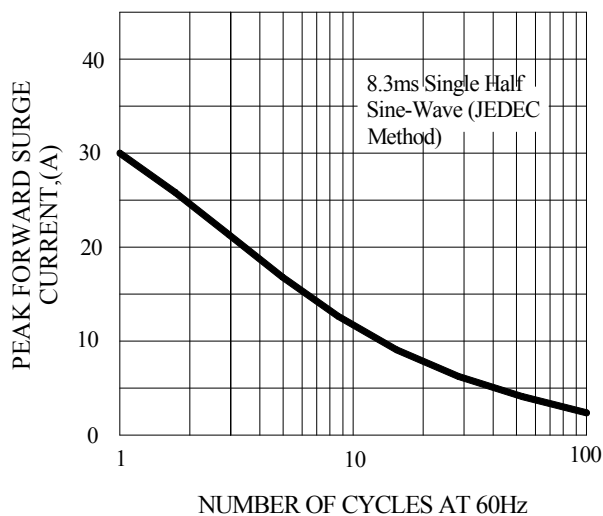


FIG.4-TYPICAL REVERSE CHARACTERISTICS

