Kingtronics®

MB1S THRU MB10S

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE: 100 to 1000 Volts FORWARD CURRENT: 0.8 Ampere

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing
- Molded plastic technique results in inexpensive product
- Lead tin plated copper

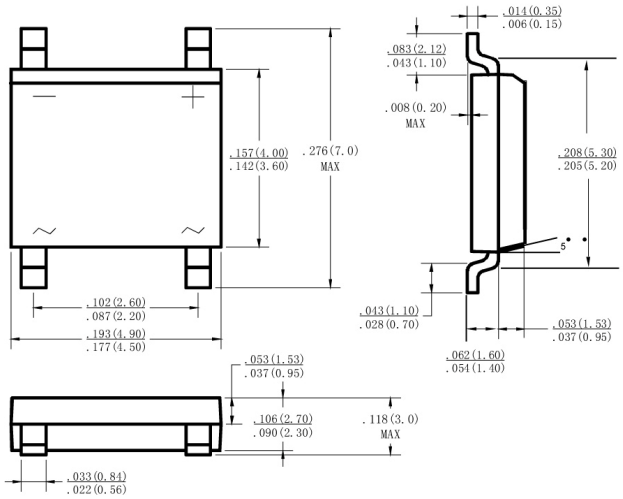
MECHANICAL DATA

- Polarity: Symbol molded on body
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load derate current by 20%

MBS



Dimensions in inches and (millimeters)

CHARACTERISTICS	*SYMBOLS*	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @T_A=40 ℃	$I_{(AV)}$	0.8						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	30						A
Peak Forward Voltage at 0.8A DC	V_F	1.1						V
Maximum DC Reverse Current @T_J=25℃	I_R	5.0						μA
at Rated DC Blocking Voltage @T_J=125℃		500						
Typical Junction Capacitance Per Element (Note2)	C_J	15						℃/W
Typical Thermal Resistance (Note3)	$R_{\theta JL}$	75						
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

NOTES: 1.Mounted on P.C. board. 2. Measured at1.0MHz and applied reverse voltage of 4.0V DC. 3. Thermal resistance junction to case

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RATING AND CHRACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

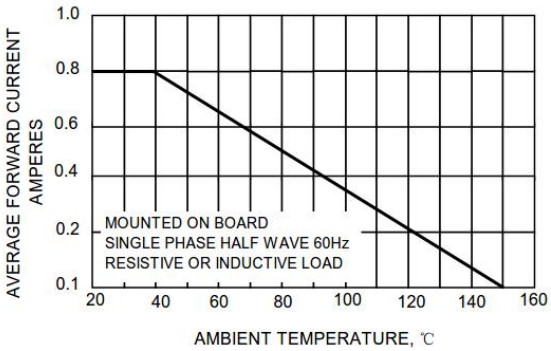

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

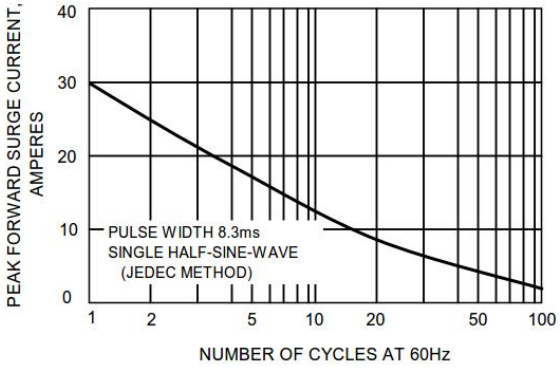

FIG.3-TYPICAL REVERSE CHARACTERISTICS

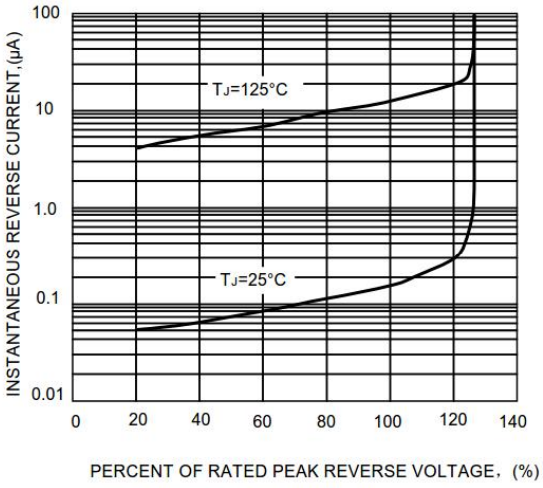

FIG.4-TYPICAL FORWARD CHARACTERISTICS

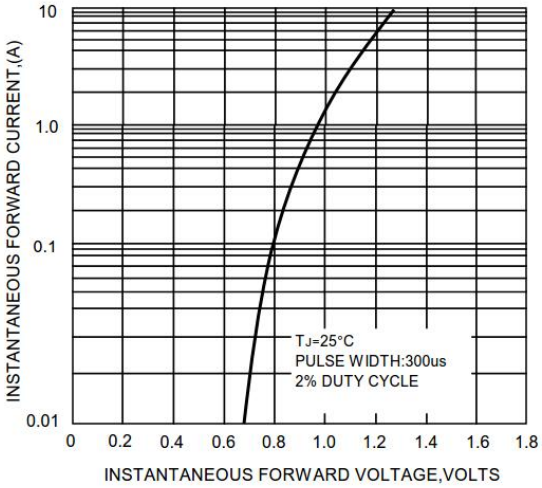
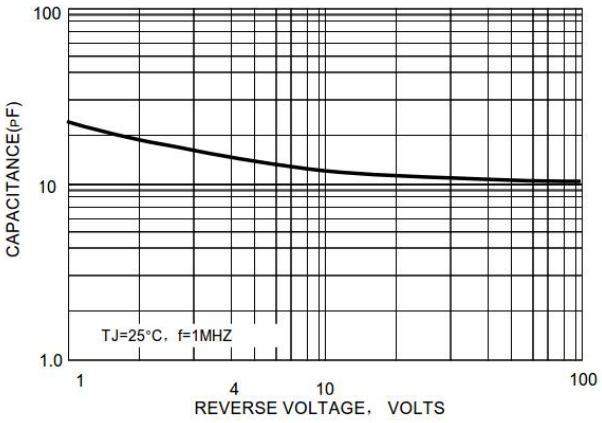
FIG.5-TYPICAL JUNCTION CAPACITANCE