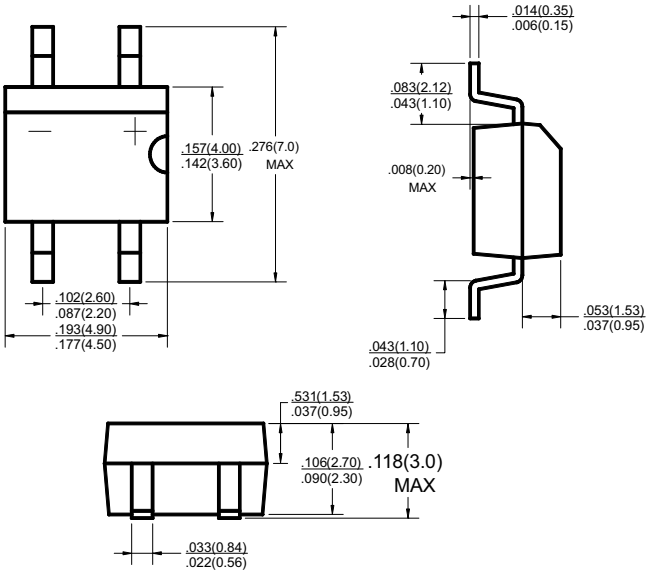
SURFACE MOUNT BRIDGE RECTIFIER
MB1S Thru MB10S Miniature 0.8 / 1.0 Amp

RoHS

Glass Passivated Bridge Rectifiers
Voltage Range 100 to 1000 Volts
Current 0.8 / 1.0 Amperes



MBS
Dimensions in inches and(millimeters)

FEATURES

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Low leakage
  results in inexpensive product
- High temperature soldering capability:
  260°C/10 seconds/0.375" (9.5mm)
- Lead length at 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Molded plastic body
- Solder plated leads
- Polarity: As marked

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capactitive load, derate current by 20%

Parameter	Symbol	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
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 • On glass-epoxy • On aluminum substrate	$I_{(AV)}$	0.8 1.0						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35						A
I^2t for fusing (t < 8.3ms), non-repetitive	I^2t	5.1						A^2S
Maxmumum Instantaneous Forward Voltage (IFM = 4.0A)	V_F	1.05						V
Maxmimum DC Reverse Current @ T_A = 25°C At Rated DC Blocking Voltage per Leg @ T_A = 125°C	I_R	10 500						μA
Typical Thermal Resistance	$R_{\theta JA}$	85 (Note 1) 70 (Note 2)						°C/W
	$R_{\theta JL}$	20						
Operating Temperature Range	T_J	-55 to +150						°C
Storage Temperature Range	T_{STG}	-55 to +150						°C

NOTE: 1. On glass epoxy mounted on 0.05"x0.05" (1.3x1.3mm) pads
2. On aluminum substrate P.C.B.with an area of 0.8x0.8" (20x20mm) mounted on 0.05"X0.05" (1.3X1.3mm) solder pad.

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RATING & CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

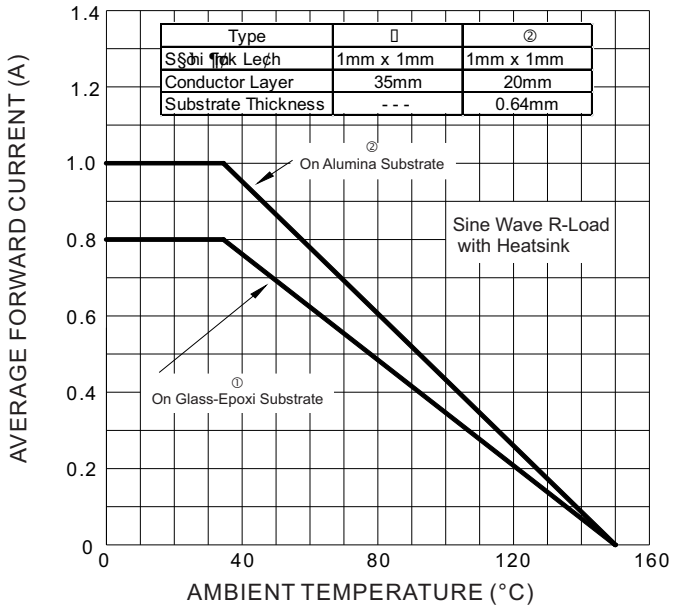


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

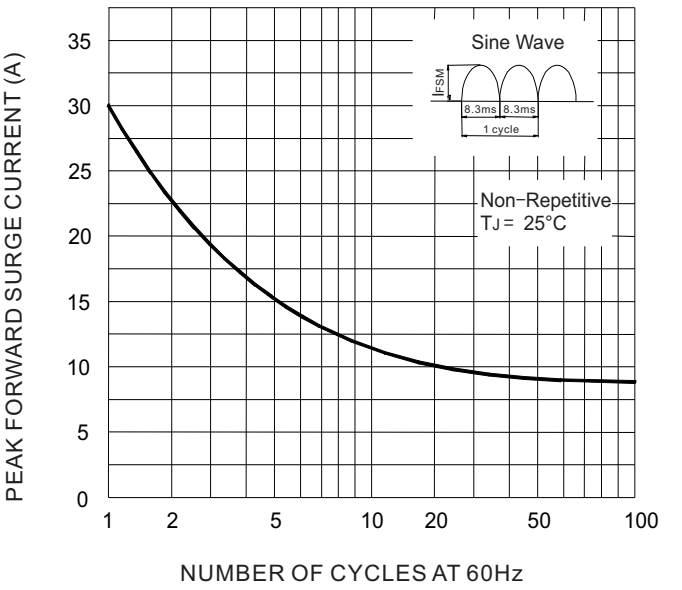


FIG.3-TYPICAL INSTANTANEOUS FORAWARD CHARACTERISTICS

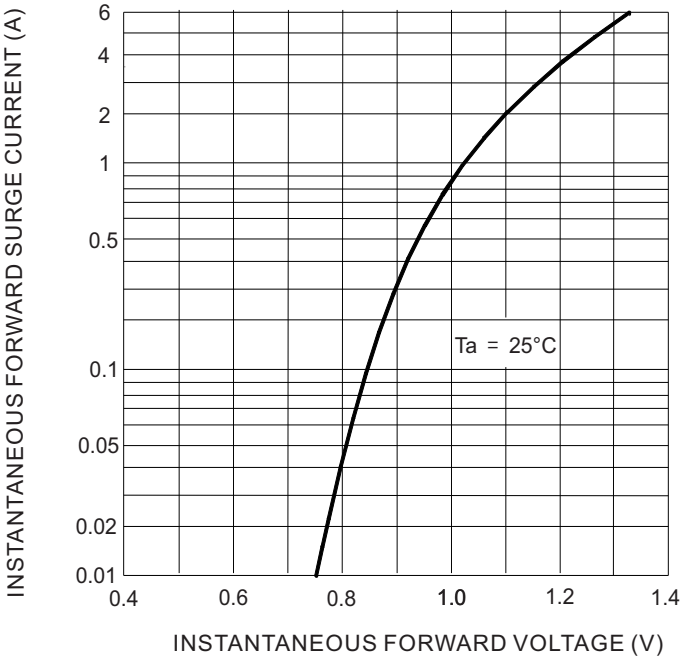
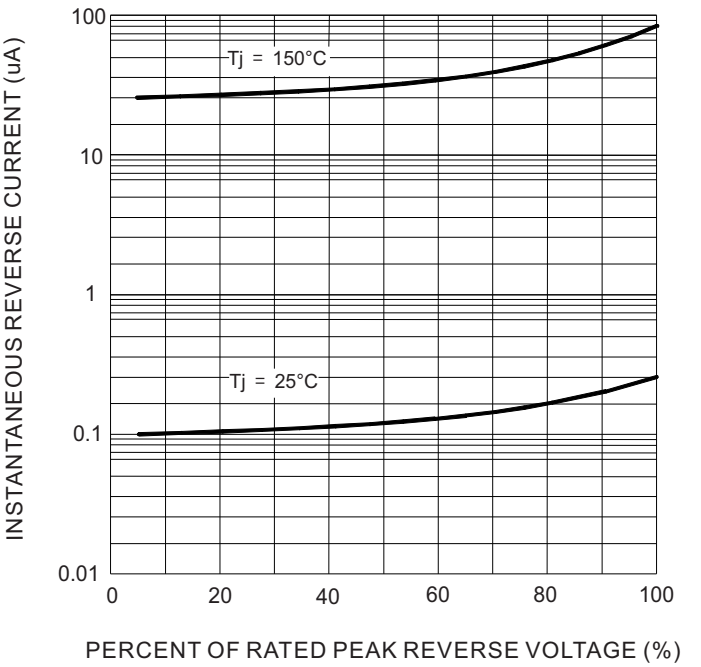


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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