

# TB1M~TB10M-HAF

## Surface Mount Flat Bridge Rectifier

Reverse Voltage - 100 to 1000 V

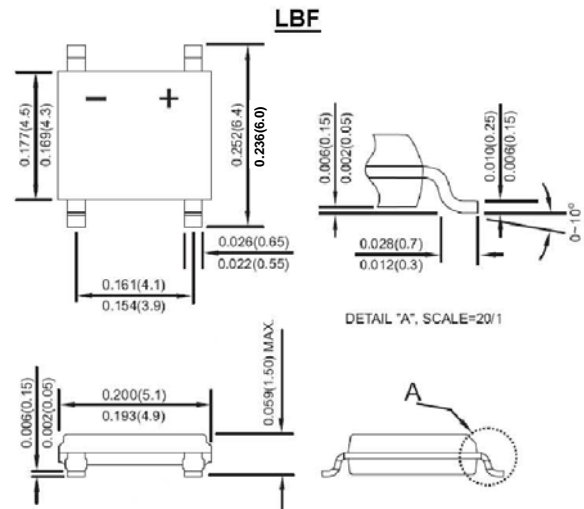
Forward Current - 1 A

### Features

- Ideal for printed circuit board
- Glass passivated chip
- Reliable low cost construction utilizing molded plastic technique
- Small size, simple installation
- Halogen and Antimony Free(HAF), RoHS compliant

### Mechanical Data

- **Terminal:** Plated leads solderable per MIL-STD 202E, method 208C
- **Case:** UL-94 Class V-0 recognized flame retardant epoxy
- **Polarity:** Polarity symbol marked on body



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical characteristics

Single-phase, half-wave, 60 Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20 %.

Parameter	Symbols	TB1M	TB2M	TB4M	TB6M	TB8M	TB10M	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 on Glass-epoxy P.C.B.	$I_{F(AV)}$	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30						A
Maximum Instantaneous Forward Voltage at Forward Current 0.4 A	$V_F$	0.95						V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5 100						$\mu\text{A}$
Typical Thermal Resistance Junction to Lead On Glass-epoxy P.C.B.	$R_{\theta JL}$ $R_{\theta JA}$	42 88						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150						$^\circ\text{C}$

**TOP DYNAMIC**



Dated: 29/02/2016 Rev: 02

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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

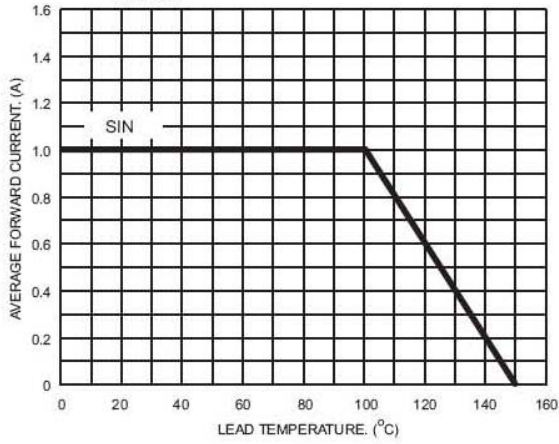


FIG.2- TYPICAL FORWARD CHARACTERISTICS

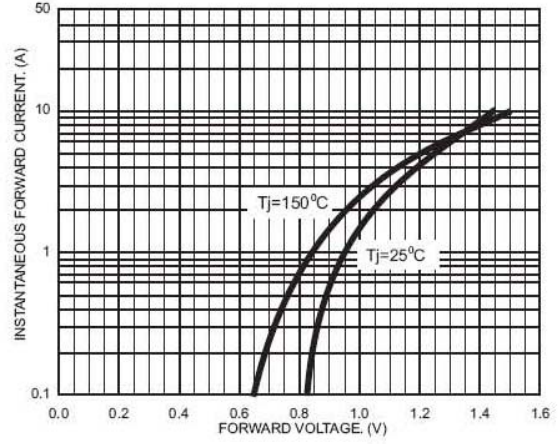


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

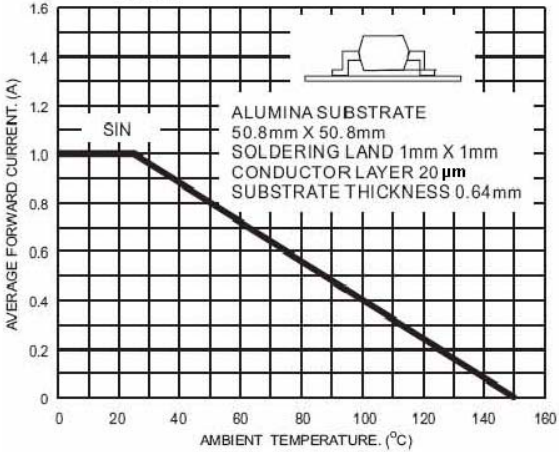


FIG.4- FORWARD POWER DISSIPATION

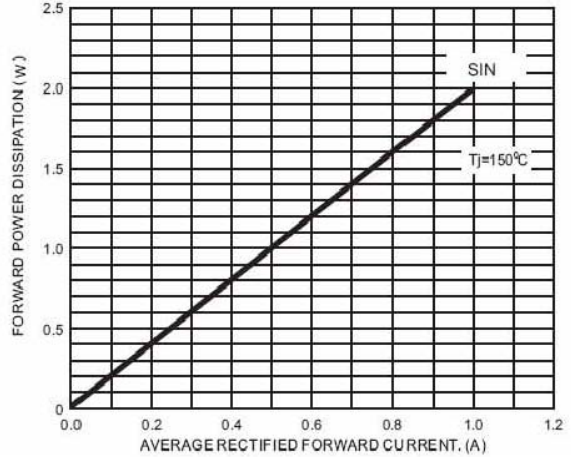
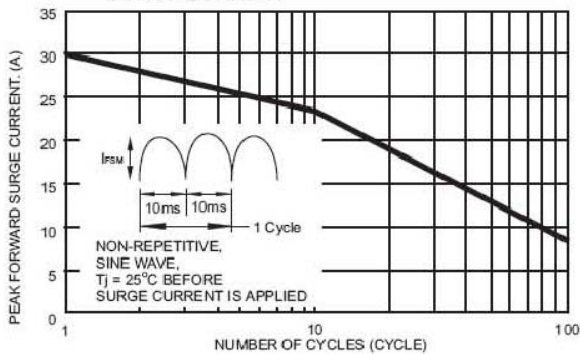


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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ISO14001 : 2004 Certificate No. 121505007 ISO 9001 : 2008 Certificate No. 50114012 OHSAS 18001 : 2007 Certificate No. 05131506006 IECQ QC 080000 Certificate No. EQ3-AMC0014.002

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