

TB1S~TB10S

Surface Mount Flat Bridge Rectifier

Reverse Voltage - 100 to 1000 V

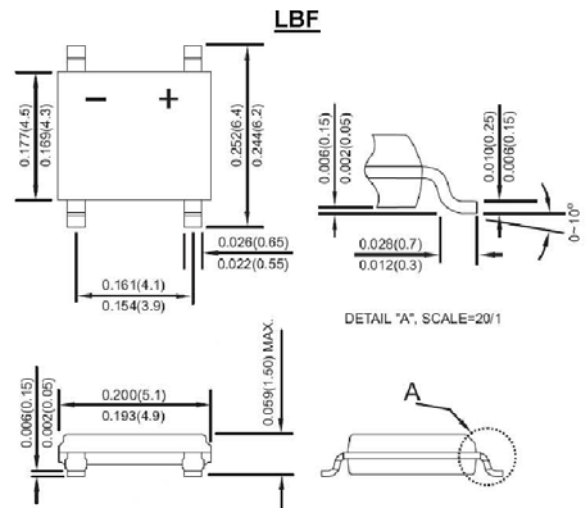
Forward Current - 0.8 A

Features

- Ideal for printed circuit board
- Glass passivated chip
- Reliable low cost construction utilizing molded plastic technique
- Small size, simple installation

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

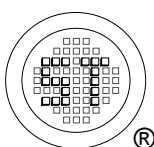


Dimensions in inches and (millimeters)

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 | TB1S | TB2S | TB4S | TB6S | TB8S | TB10S | 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. | $I_{F(AV)}$ | 0.8 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 25 | | | | | | 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 | | | | | | μA |
| 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 | | | | | | $^\circ\text{C}$ |



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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

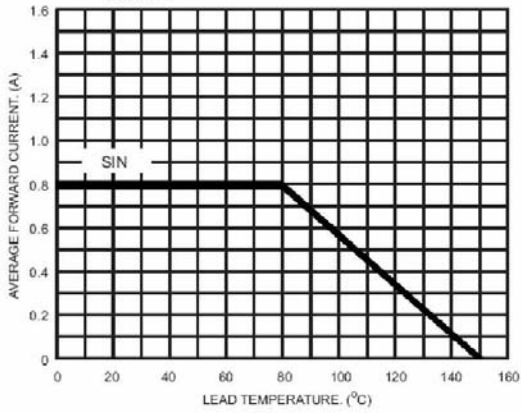


FIG.2- TYPICAL FORWARD CHARACTERISTICS

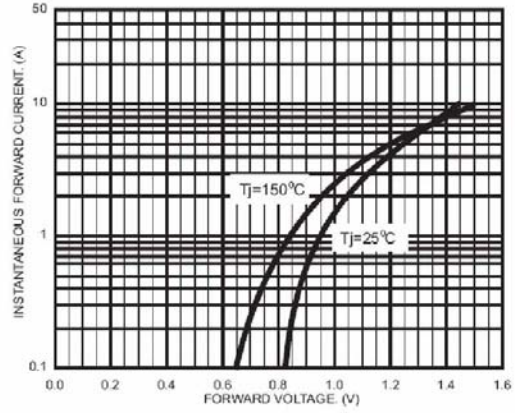


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

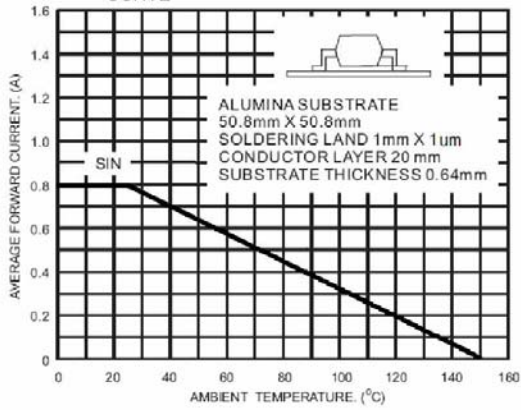


FIG.4- FORWARD POWER DISSIPATION

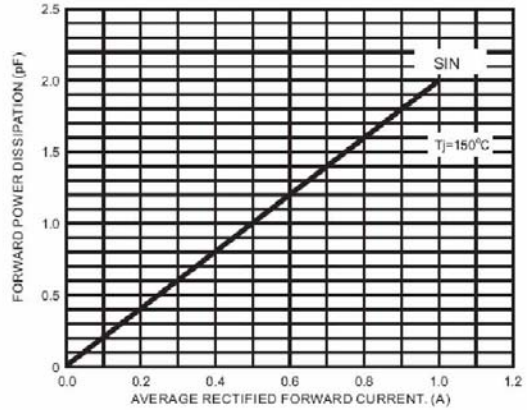


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

