

Silicon Bridge Rectifiers

LB08M

Features

- Glass passivated junction
- High surge current capability
- Saves space on printed circuit boards
- High temperature soldering guaranteed:
260°C/10 seconds



- RoHS Compliant

Mechanical Data

- Case: LB molded plastic
- Molding compound meets UL 94 V-0 flammability rating
- Terminals: Lead Free Plating (Matte Tin Finish.)
- Polarity indicator: As marked on body

Maximum Ratings (@T_A = 25°C unless otherwise specified)

| Characteristic | Symbol | LB08M | Units |
|--|--|-------|------------------|
| Peak repetitive reverse voltage | V _{RRM} | 1000 | V |
| RMS reverse voltage | V _{RMS} | 700 | V |
| DC blocking voltage | V _{DC} | 1000 | V |
| Maximum average forward output current | I _{F(AV)} | 0.8 | A |
| Peak forward surge current, 8.3ms single half-sine-wave | @T _J = 25°C I _{FSM} | 25 | A |
| I ² t Rating for fusing | @T _J = 25°C I ² t | 2.6 | A ² s |

Thermal Characteristics

| Parameter | Symbol | LB08M | Units |
|--|------------------|-----------------|-------|
| Typical thermal resistance per leg (Note 1) | R _{θJA} | 58 | °C/W |
| | R _{θJC} | 20 | |
| | R _{θJL} | 16 | |
| Operating junction temperature range | T _J | - 55 ---- + 150 | °C |
| Storage temperature range | T _{STG} | - 55 ---- + 150 | °C |

Note:

1. Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas

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Electrical Characteristics (@T_A = 25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | | Typ. | Max. | Units |
|---------------------------------------|----------------|-------------------------------------|------------------------|------|------|-------|
| Maximum instantaneous forward voltage | V _F | I _F =0.8A Per Diode | | -- | 1.1 | V |
| Maximum Reverse current | I _R | Rated V _R , Per Diode | @T _A =25°C | -- | 5 | μ A |
| | | | @T _A =125°C | -- | 200 | |

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Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1-Forward Current Derating Curve

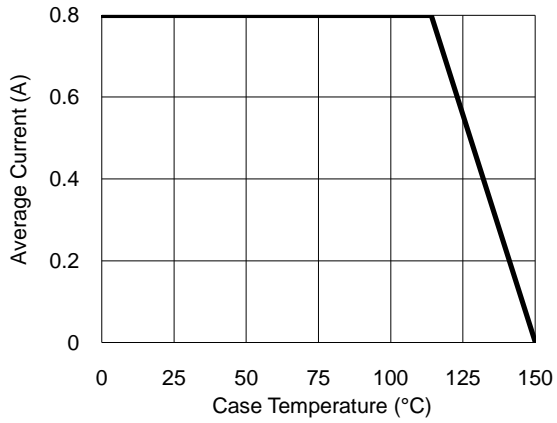


Fig.2- Surge Current Derating Curve

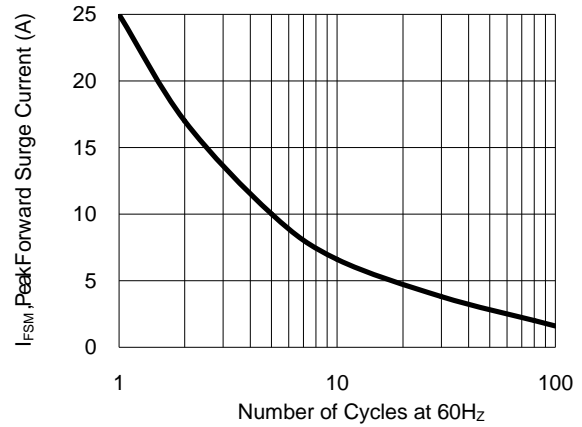


Fig.3- Typical Forward Voltage Characteristic

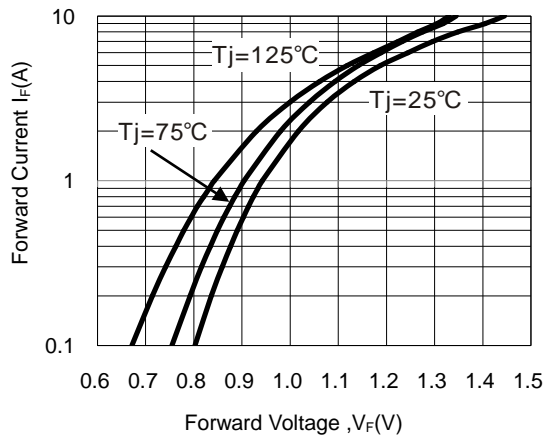
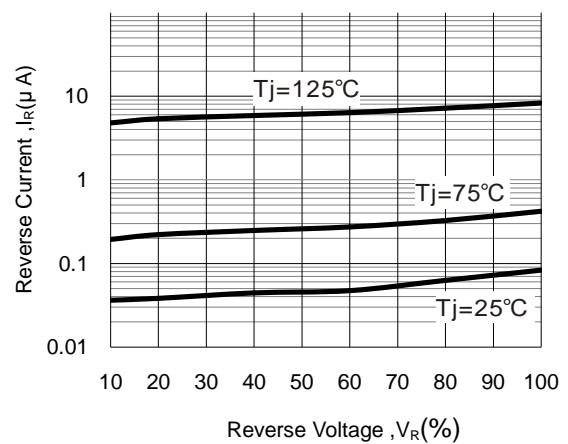


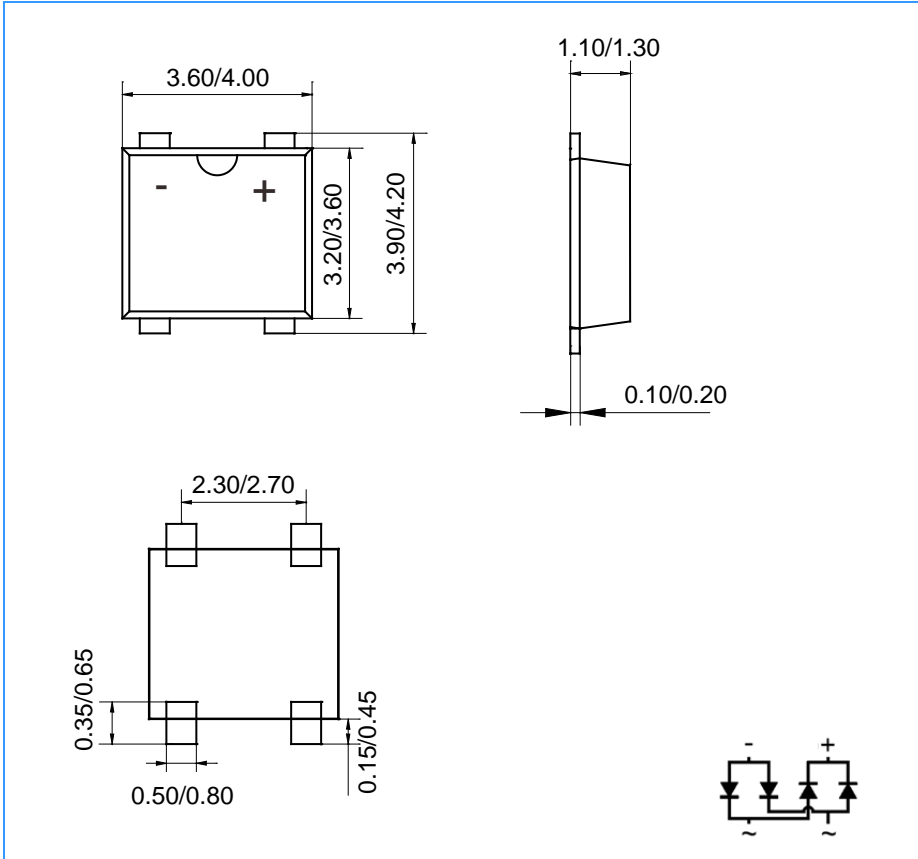
Fig.4- Typical Reverse Characteristic



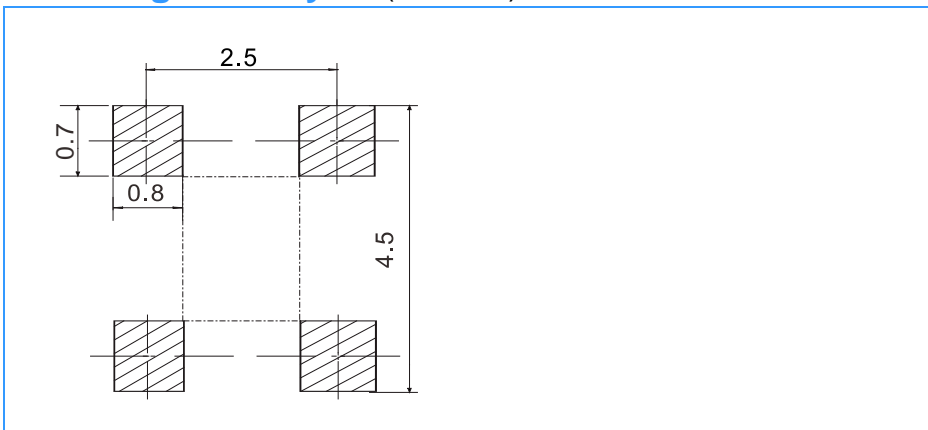
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Package Outline Dimensions(unit:mm)



Mounting Pad Layout(unit:mm)



Ordering Information

| Part No. | Marking | Package | Shipping |
|----------|---------|---------|------------------|
| LB08M | LB08M | LB | 5000 / Tape&Reel |