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|  | E502650 |
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Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- High Surge Current Capability

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -65°C to +175°C
- Typical Thermal Resistance(Note 3): 25°C/W Junction to Lead
- Typical Thermal Resistance(Note 3): 80°C/W Junction to Ambient
- Typical Thermal Resistance(Note 3): 22°C/W Junction to Case

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| LMB2S | LB2S | 200V | 140V | 200V |
| LMB4S | LB4S | 400V | 280V | 400V |
| LMB6S | LB6S | 600V | 420V | 600V |
| LMB8S | LB8S | 800V | 560V | 800V |
| LMB10S | LB10S | 1000V | 700V | 1000V |

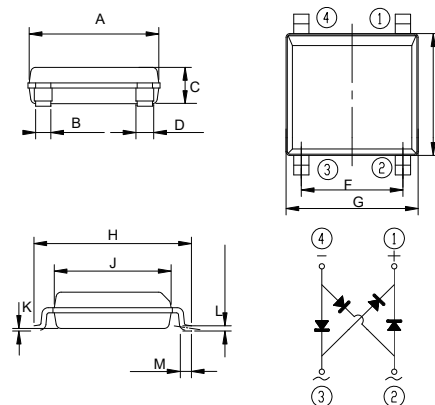
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|-----------------------|--|
| Average Forward Current | $I_{F(AV)}$ | 1.0A 0.8A | on Aluminum Substrate; on Glass-epoxy P.C.B |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage | V_F | 0.95V | $I_{FM} = 0.4A$; $T_J = 25^\circ C$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 5µA 100µA | $T_J = 25^\circ C$ $T_J = 125^\circ C$ |
| Rating For Fusing | I^2t | 3.735A ² s | t<8.30ms |
| Typical Junction Capacitance | C_J | 8pF | $V_R=4V, 1MHz$ |

- Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.
 2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 3. Device Mounted P.C.B with 0.47x0.47"(12mmx12mm) Copper Pads.

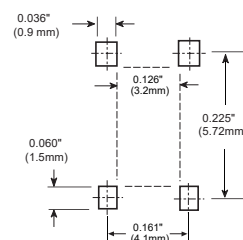
1.0 Amp Single Phase Glass Passivated Bridge Rectifier 200 to 1000 Volts

LMBS-1



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.197 | 0.205 | 4.90 | 5.20 | |
| B | 0.024 | | 0.60 | | |
| C | --- | 0.059 | --- | 1.50 | |
| D | 0.024 | 0.032 | 0.60 | 0.80 | |
| E | --- | 0.189 | --- | 4.80 | |
| F | 0.150 | 0.165 | 3.80 | 4.20 | |
| G | --- | 0.209 | --- | 5.30 | |
| H | 0.236 | 0.252 | 6.00 | 6.60 | |
| J | 0.177 | 0.185 | 4.30 | 4.70 | |
| K | 0.0009 | 0.004 | 0.02 | 0.21 | |
| L | 0.006 | 0.012 | 0.15 | 0.30 | |
| M | 0.017 | 0.031 | 0.25 | 0.80 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

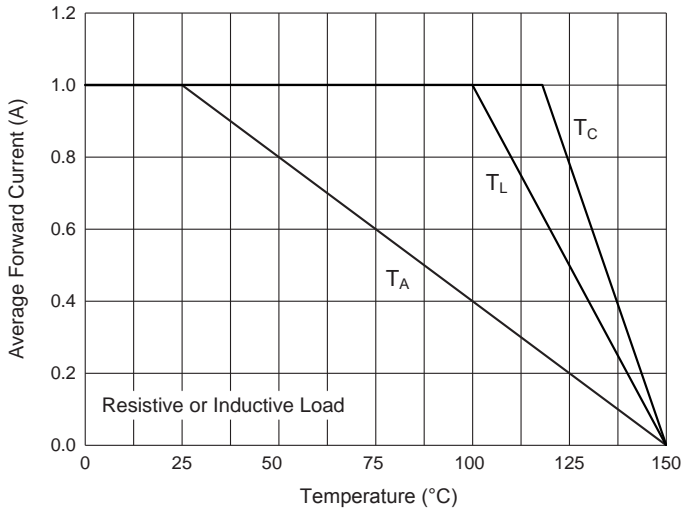


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

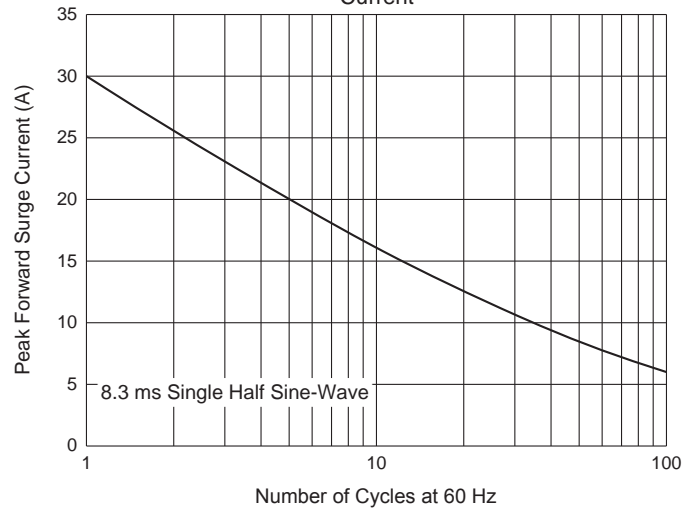


Fig. 3 - Typical Instantaneous Forward Characteristics

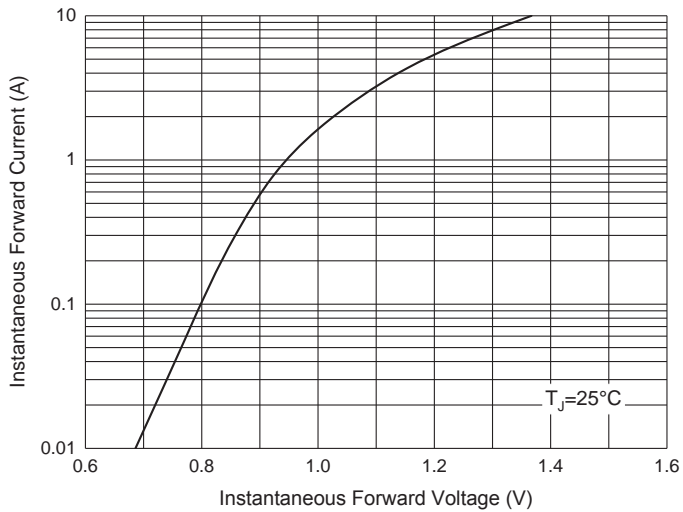
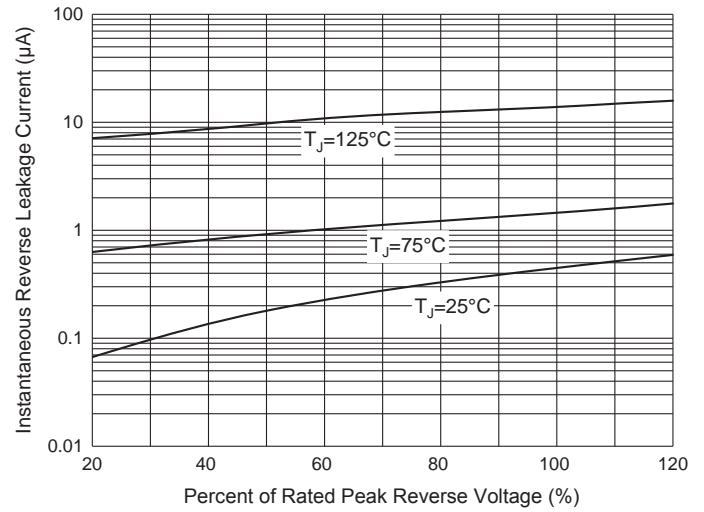


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

| Device | Packing |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;5Kpcs/Reel |

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