

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: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Lead
- Typical Thermal Resistance(Note3): 76°C/W Junction to Ambient
- Typical Thermal Resistance(Note4): 134°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| LMB32S | LMB32S | 20V | 14V | 20V |
| LMB34S | LMB34S | 40V | 28V | 40V |
| LMB36S | LMB36S | 60V | 42V | 60V |
| LMB38S | LMB38S | 80V | 56V | 80V |
| LMB310S | LMB310S | 100V | 70V | 100V |

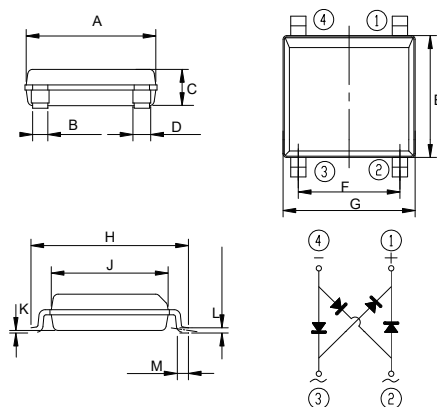
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|--|-------------|-------------------------|--|
| Average Forward Current | $I_{F(AV)}$ | 3.0A | See Fig1 |
| Peak Forward Surge Current | I_{FSM} | 70A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage LMB32S~LMB34S LMB36S LMB38S~LMB310S | V_F | 0.55V 0.65V 0.85V | $I_{FM} = 1.5A;$ $T_A = 25^\circ C$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 0.5mA | $T_A = 25^\circ C$ |

- 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. Between Junction and Ambient, on Alumina Substrate
 4. Between Junction and Ambient, on Glass-epoxy Substrate

3 Amp Surface Mount Schottky Bridge Rectifier 20 to 100 Volts

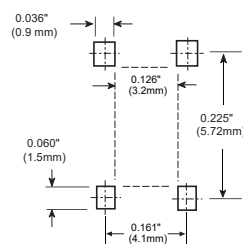
LMB3-1



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | 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 - I_o - T_a Curve

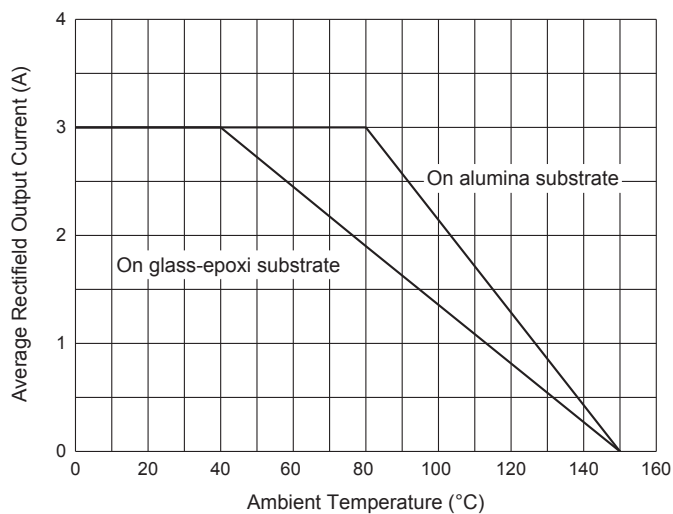


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

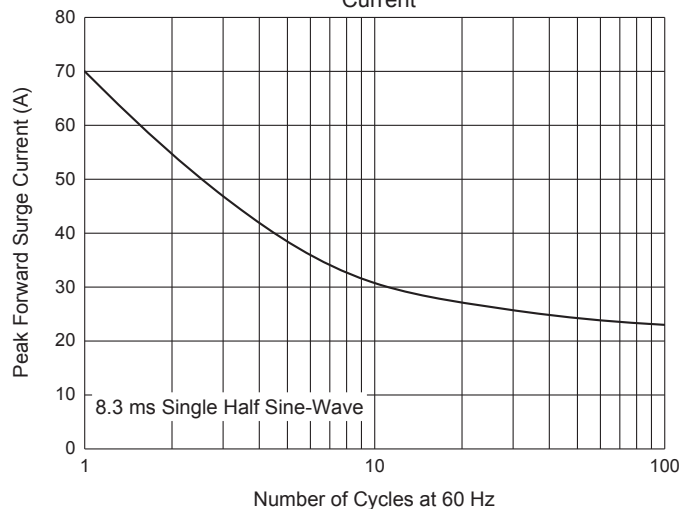


Fig. 3 - Typical Instantaneous Forward Characteristics

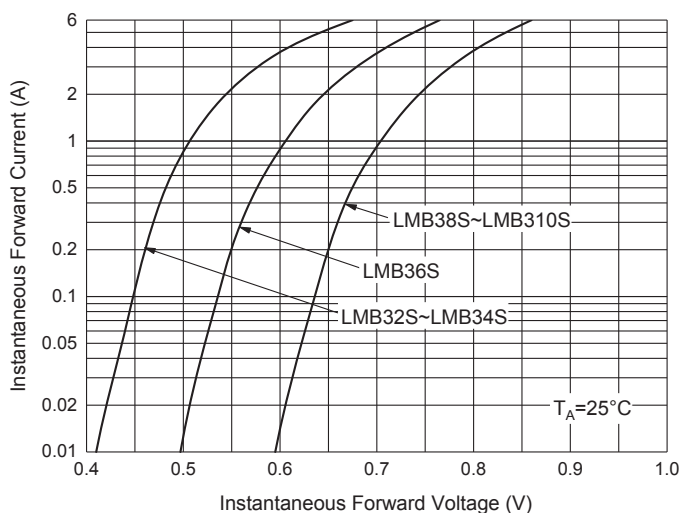


Fig. 4 - Typical Reverse Leakage Characteristics

