

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Low Profile Package
- Low Forward Voltage Drop
- High Surge Forward Current Capability
- Extremely Low Thermal Resistance
- Halogen Free. "Green" Device (Note 2)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 3): 15 °C/W Junction to Case
- Typical Thermal Resistance(Note 3) : 25 °C/W Junction to Lead
- Typical Thermal Resistance (Note 3): 65 °C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SL310BFL        | SL310          | 100V                                   | 70V                 | 100V                        |

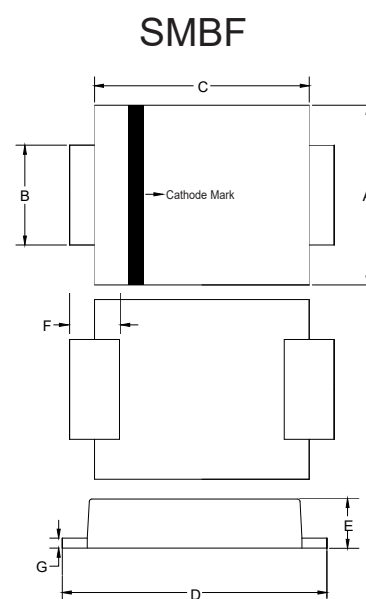
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |               |   |
|---|-------------|---------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 3.0A          | $T_L=120^\circ\text{C}$                           |
| Peak Forward Surge Current                              | $I_{FSM}$   | 60A           | 8.3ms, Half Sine                                  |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 0.6V          | $I_F=3.0\text{A}; T_J=25^\circ\text{C}$           |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$       | 0.1mA<br>10mA | $T_J=25^\circ\text{C}$<br>$T_J=125^\circ\text{C}$ |

Note :

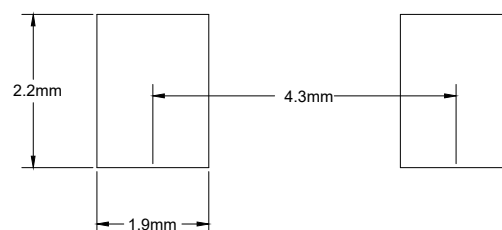
1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.
2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
3. Device Mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas.

# 3 Amp Low VF Schottky Barrier Rectifier 100 Volts



| DIM | DIMENSIONS |       |      |      | NOTE |
|-----|------------|-------|------|------|------|
|     | INCHES     |       | MM   |      |      |
| A   | 0.134      | 0.150 | 3.40 | 3.80 |      |
| B   | 0.075      | 0.083 | 1.90 | 2.10 |      |
| C   | 0.163      | 0.175 | 4.15 | 4.45 |      |
| D   | 0.201      | 0.220 | 5.10 | 5.60 |      |
| E   | 0.041      | 0.061 | 1.05 | 1.55 |      |
| F   | 0.028      | 0.053 | 0.70 | 1.35 |      |
| G   | 0.006      | 0.010 | 0.15 | 0.25 |      |

### Suggested Solder Pad Layout



**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

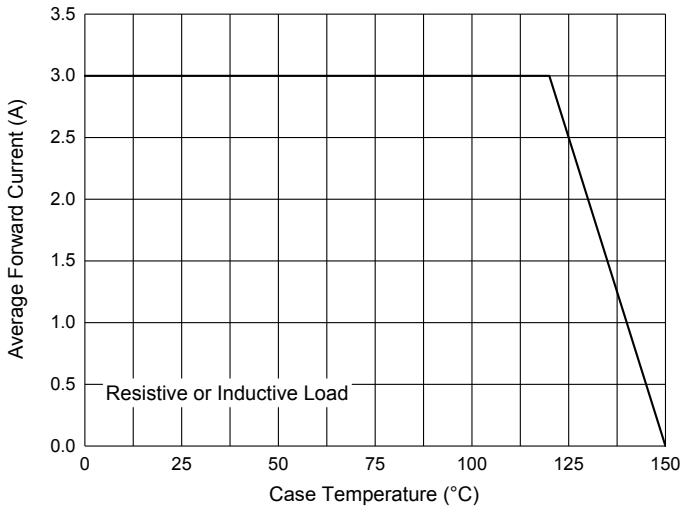


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

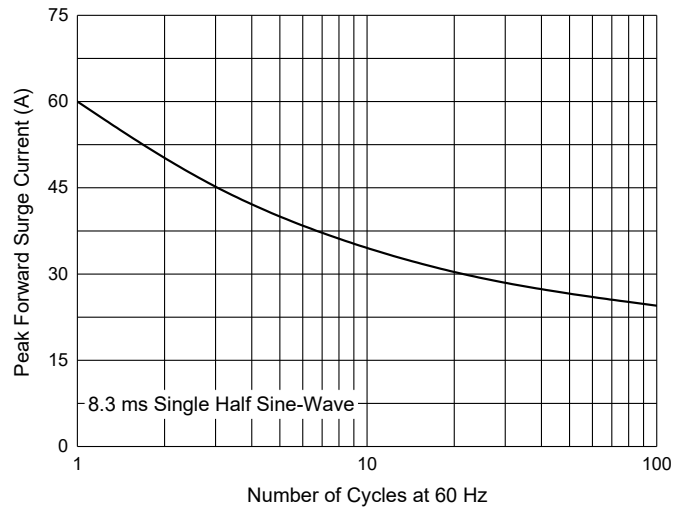


Fig. 3 - Typical Instantaneous Forward Characteristics

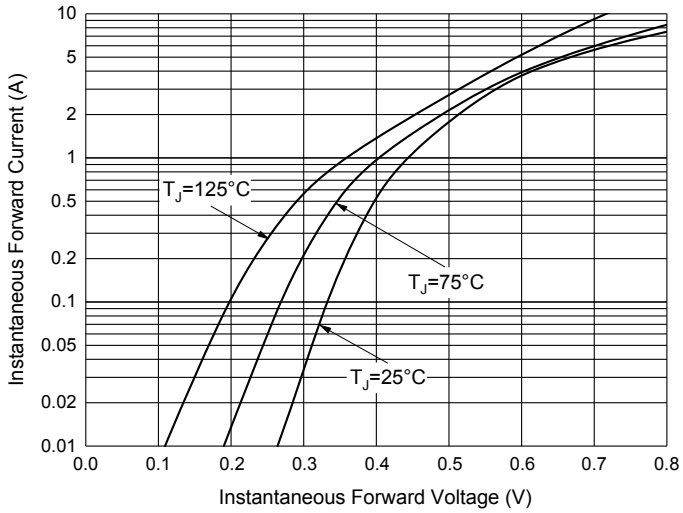
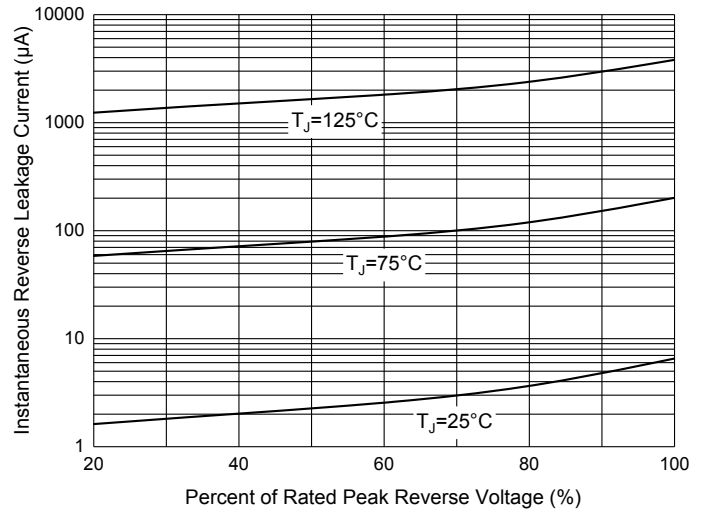


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device      | Packing          |
|-------------|------------------|
| SL310BFL-TP | Tape&Reel: 5Kpcs |

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