



**THE DATASHEET OF
SL310AFL-TP**



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
- 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
- Maximum Thermal Resistance: 16°C/W Junction to Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SL34AFL | SL34A | 40V | 28V | 40V |
| SL36AFL | SL36A | 60V | 42V | 60V |
| SL310AFL | SL310A | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

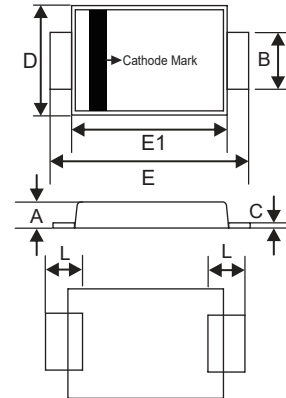
| | | | |
|---|-------------|----------------|---|
| Average Forward Current | $I_{F(AV)}$ | 3.0A | $T_L=120^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 60A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage | V_F | SL34AFL 0.45V | $I_{FM}=3.0A;$ $T_J=25^\circ\text{C}$ |
| | | SL36AFL 0.50V | |
| | | SL310AFL 0.60V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 0.1mA 10mA | $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$ |

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.

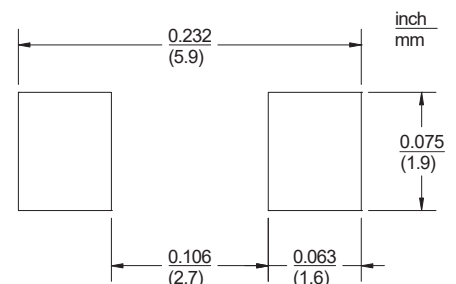
**3 Amp Low VF Schottky Rectifier
40 to 100 Volts**

DO-221AC(SMA-FL)



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.035 | 0.049 | 0.90 | 1.25 | |
| B | 0.049 | 0.065 | 1.25 | 1.65 | |
| C | 0.004 | 0.016 | 0.10 | 0.40 | |
| D | 0.089 | 0.116 | 2.25 | 2.95 | |
| E | 0.173 | 0.220 | 4.40 | 5.60 | |
| E1 | 0.126 | 0.181 | 3.20 | 4.60 | |
| L | 0.020 | 0.059 | 0.50 | 1.50 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

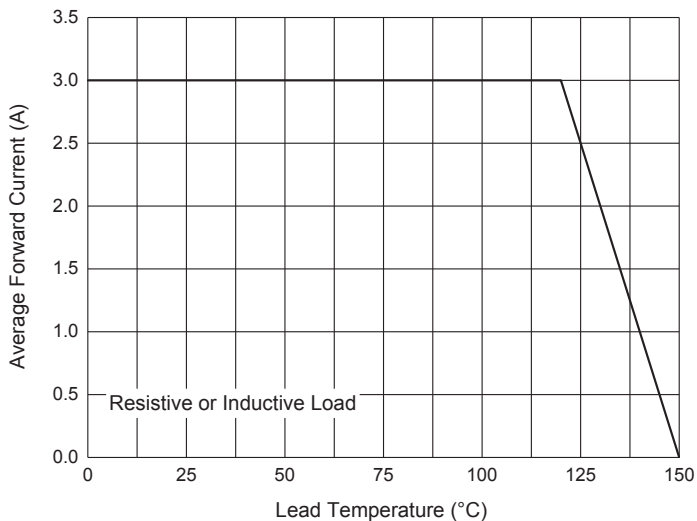


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

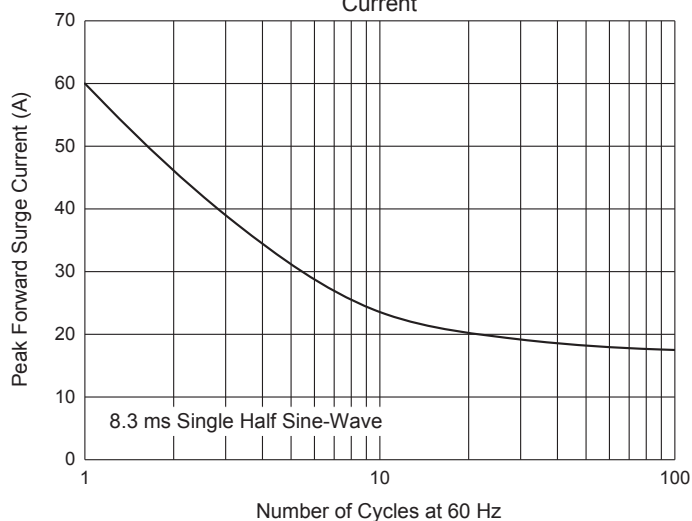


Fig. 3 - Typical Instantaneous Forward Characteristics

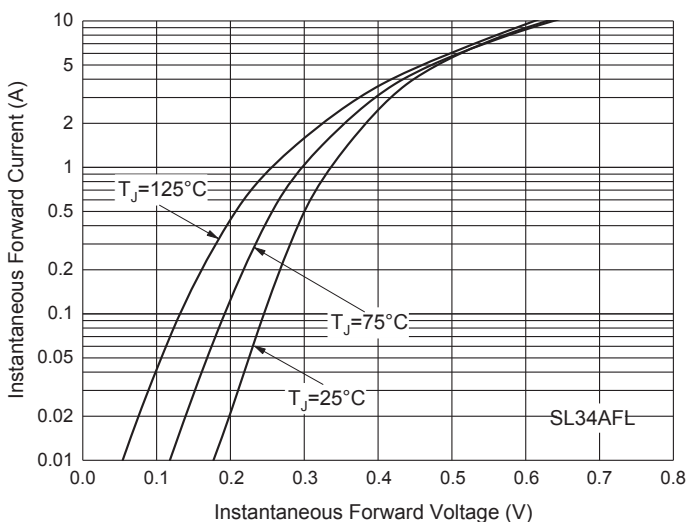


Fig. 4 - Typical Instantaneous Forward Characteristics

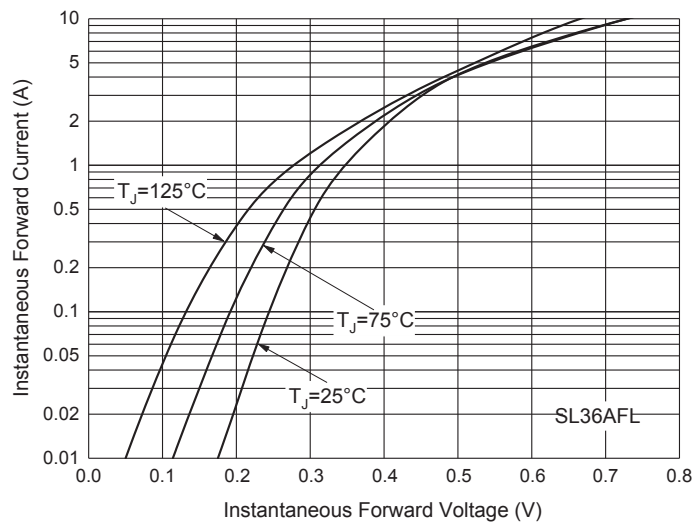


Fig. 5 - Typical Instantaneous Forward Characteristics

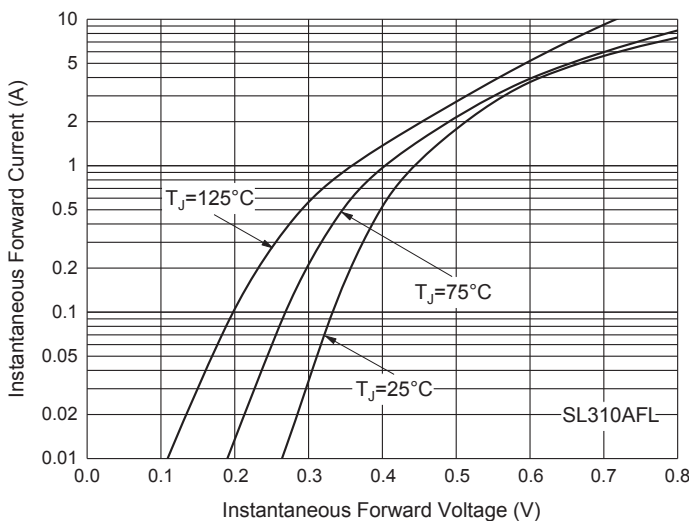
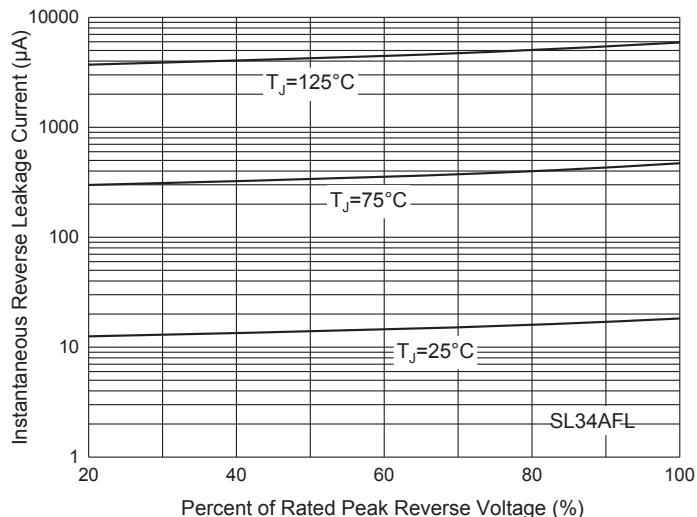


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

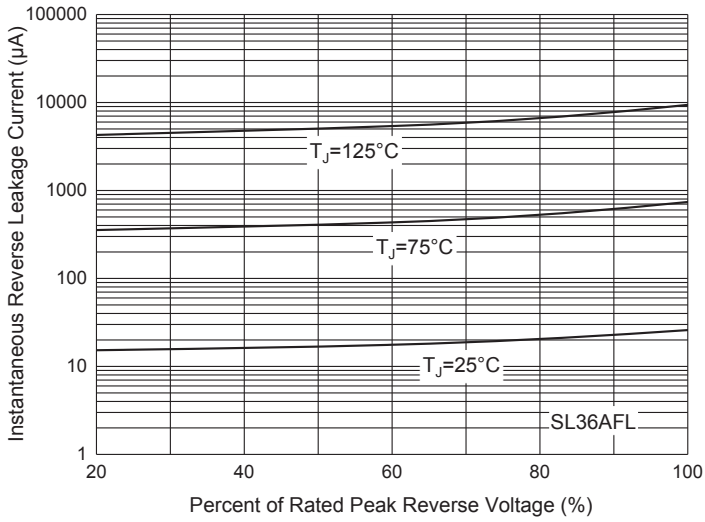
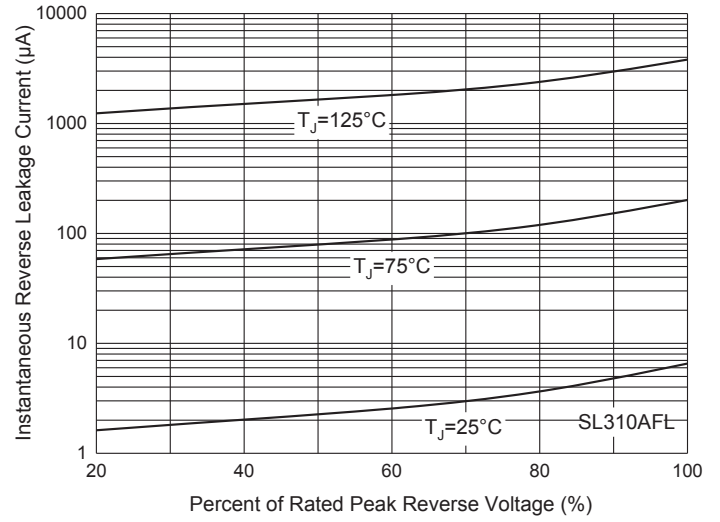


Fig. 8 - Typical Reverse Leakage Characteristics



Ordering Information

| Device | Packing |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 10Kpcs/Reel |

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