



# THE DATASHEET OF SK810L-TP



## Features

- High Current Capability
- Low Forward Voltage
- For Surface Mount Application
- 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
- 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) : 50°C/W Junction to Ambient
- Typical Thermal Resistance(Note 3) : 18°C/W Junction to Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SK82L           | SK82           | 20V                                    | 14V                 | 20V                         |
| SK83L           | SK83           | 30V                                    | 21V                 | 30V                         |
| SK835L          | SK835          | 35V                                    | 24.5V               | 35V                         |
| SK84L           | SK84           | 40V                                    | 28V                 | 40V                         |
| SK845L          | SK845          | 45V                                    | 31.5V               | 45V                         |
| SK86L           | SK86           | 60V                                    | 42V                 | 60V                         |
| SK88L           | SK88           | 80V                                    | 56V                 | 80V                         |
| SK810L          | SK810          | 100V                                   | 70V                 | 100V                        |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

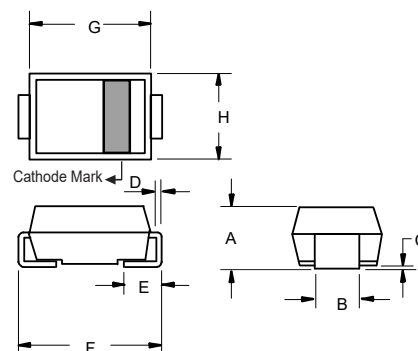
|  |             |                |   |
|--|-------------|----------------|---|
| Average Forward Current  | $I_{F(AV)}$ | 8.0A           | $T_L=95^\circ\text{C}$                              |
| Peak Forward Surge Current                                       | $I_{FSM}$   | 200A           | 8.3ms, Half Sine                                    |
| Maximum Instantaneous Forward Voltage<br>SK82L-86L<br>SK88L-810L | $V_F$       | 0.65V<br>0.80V | $I_{FM}=8.0A$ ;<br>$T_J=25^\circ\text{C}$           |
| Maximum DC Reverse Current at Rated DC Blocking Voltage          | $I_R$       | 0.1mA<br>10mA  | $T_J=25^\circ\text{C}$ ;<br>$T_J=100^\circ\text{C}$ |
| Typical Junction Capacitance                                     | $C_J$       | 400pF          | Measured at 1.0MHz,<br>$V_R=4.0V$                   |

Note:

1. High Temperature Solder Exemptions 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. Mounted on P.C.B. With 0.6" x 0.6" (16 mm x 16 mm) Copper Pad Areas

# 8.0 Amp Schottky Rectifier 20 to 100 Volts

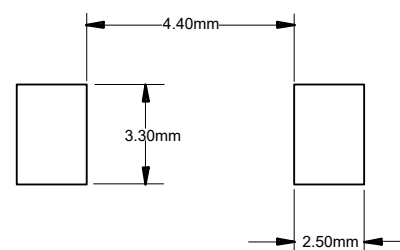
## SMC (DO-214AB)



### DIMENSIONS

| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | 0.079  | 0.103 | 2.00  | 2.62  |      |
| B   | 0.108  | 0.128 | 2.75  | 3.25  |      |
| C   | 0.002  | 0.008 | 0.051 | 0.203 |      |
| D   | 0.006  | 0.012 | 0.152 | 0.305 |      |
| E   | 0.030  | 0.060 | 0.76  | 1.52  |      |
| F   | 0.305  | 0.320 | 7.75  | 8.13  |      |
| G   | 0.260  | 0.280 | 6.60  | 7.11  |      |
| H   | 0.220  | 0.245 | 5.59  | 6.22  |      |

### Suggested Solder Pad Layout



**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

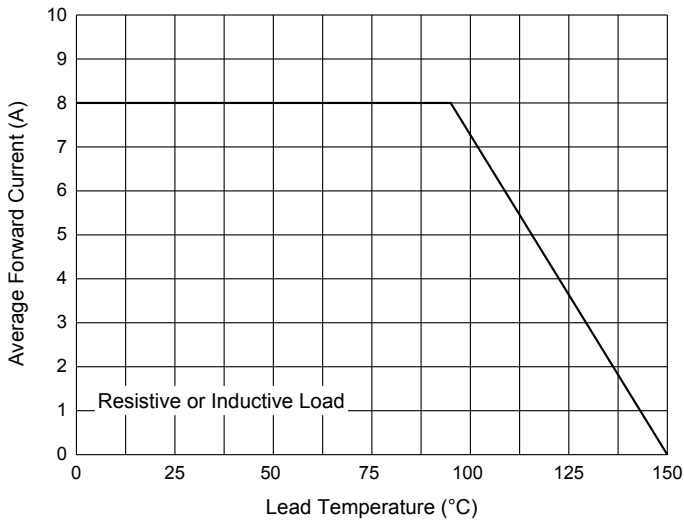


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

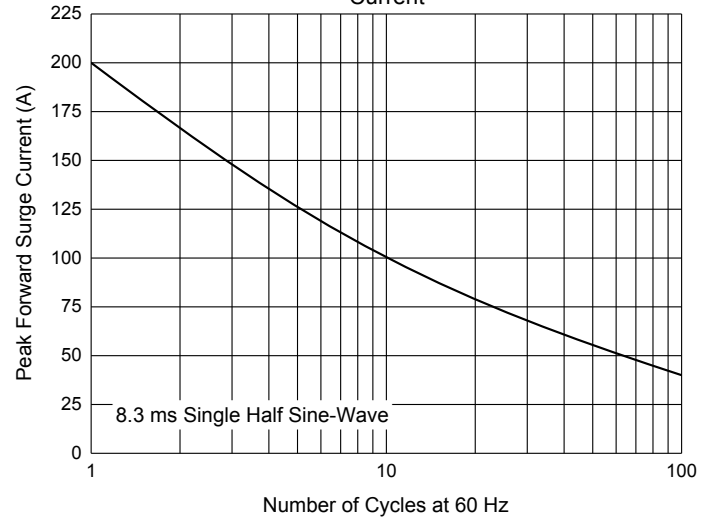


Fig. 3 - Typical Instantaneous Forward Characteristics

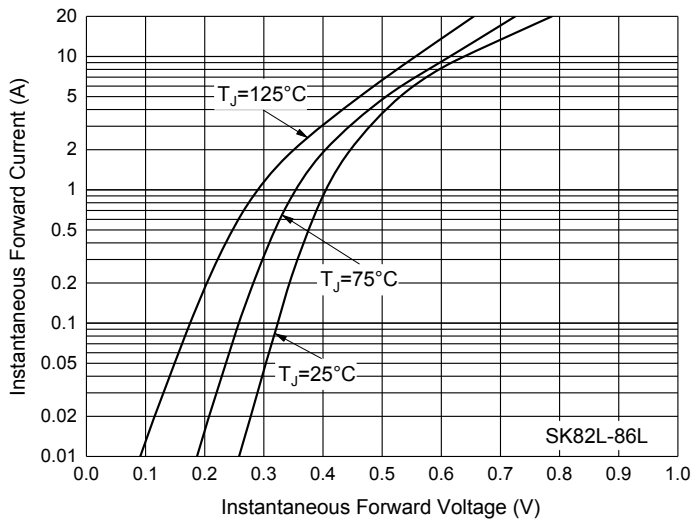


Fig. 4 - Typical Instantaneous Forward Characteristics

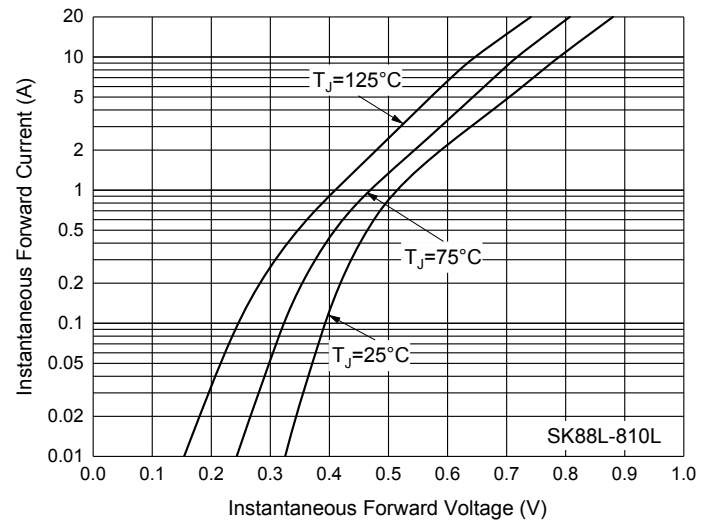


Fig. 5 - Typical Reverse Leakage Characteristics

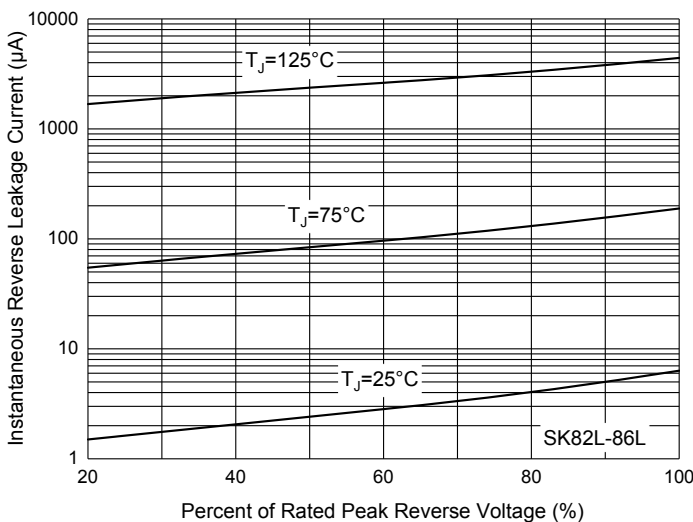
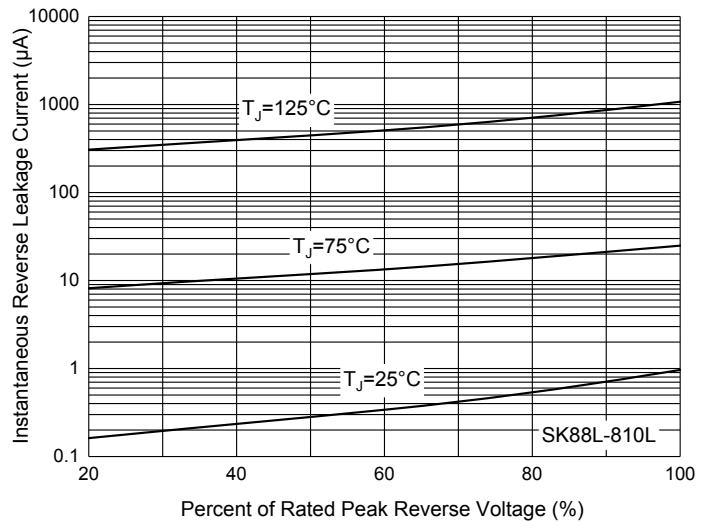


Fig. 6 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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