

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- High Current Capability
- Low Power Loss, High Efficiency.
- Guardring For Over Voltage Protection
- High Surge Capability
- 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
- Maximum Thermal Resistance: 16°C/W Junction to Lead
- Maximum Thermal Resistance: 55°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SK5150L         | SK5150         | 150V                                   | 105V                | 150V                        |
| SK5200L         | SK5200         | 200V                                   | 140V                | 200V                        |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |               |   |
|---|-------------|---------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 5.0A          | $T_C=120^\circ\text{C}$                           |
| Peak Forward Surge Current                              | $I_{FSM}$   | 150A          | 8.3ms, Half Sine                                  |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 0.87V         | $I_F=5.0A; T_J=25^\circ\text{C}$                  |
| SK5150L   |             | 0.90V         | $I_F=5.0A; T_J=25^\circ\text{C}$                  |
| SK5200L   |             | 0.75V         | $I_F=5.0A; T_J=125^\circ\text{C}$                 |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$       | 0.01mA<br>1mA | $T_J=25^\circ\text{C}$<br>$T_J=125^\circ\text{C}$ |
| Typical Junction Capacitance                            | $C_J$       | 200pF         | Measured at 1.0MHz,<br>$V_R=4.0V$                 |

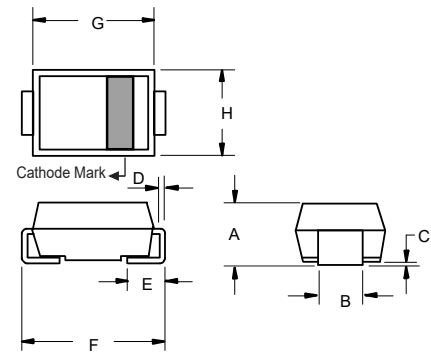
\*Pulse Test: Pulse Width 200  $\mu\text{sec}$ , Duty Cycle 2%

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.

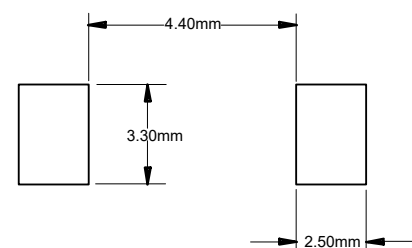
# 5 Amp Schottky Rectifier 150 to 200 Volts

## SMC (DO-214AB)



| DIM | DIMENSIONS |       |       |       | NOTE |
|-----|------------|-------|-------|-------|------|
|     | INCHES     |       | MM    |       |      |
|     | 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

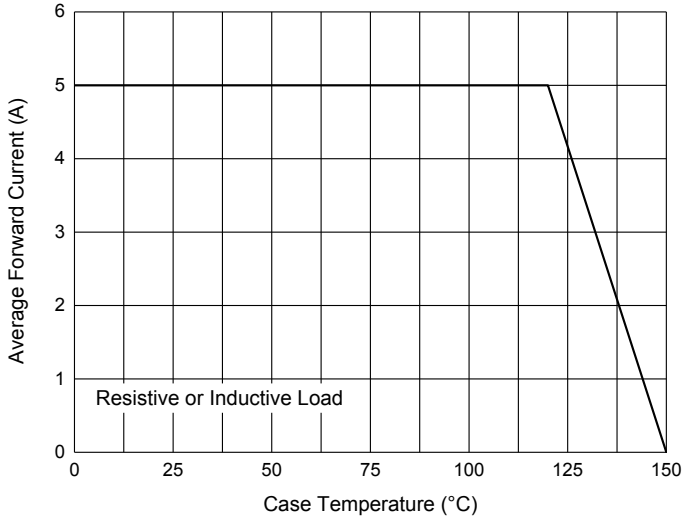


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

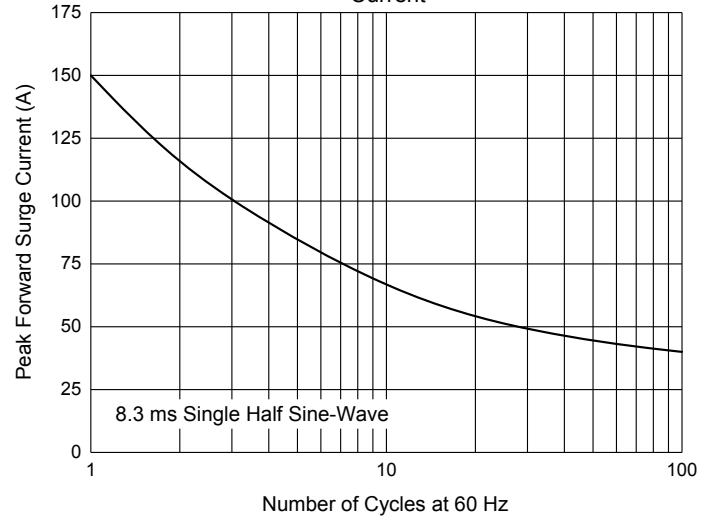


Fig. 3 - Typical Instantaneous Forward Characteristics

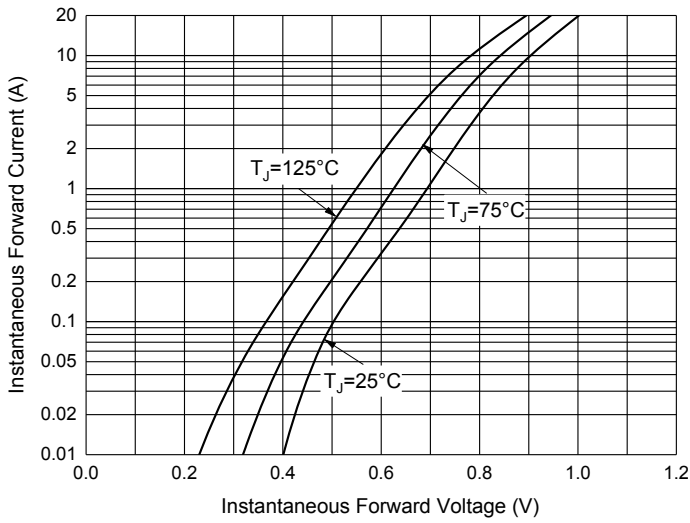
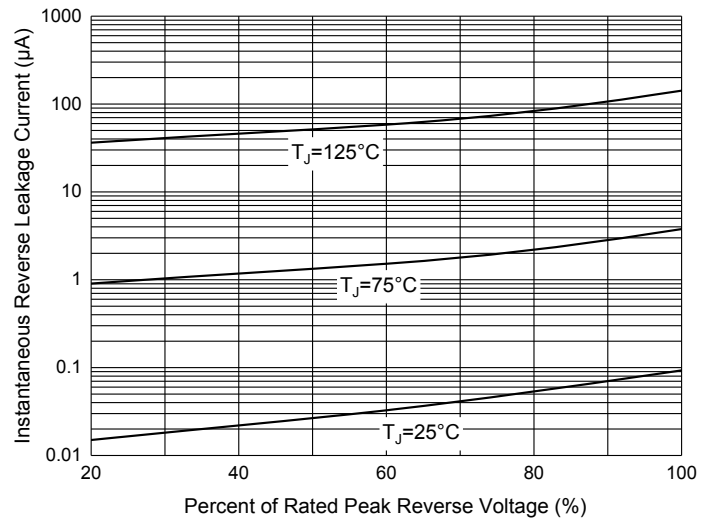


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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