



# THE DATASHEET OF SK38-TP



## Features

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

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 20°C/W Junction To Case
- Maximum Thermal Resistance: 10°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
SK32	SK32	20V	14V	20V
SK33	SK33	30V	21V	30V
SK34	SK34	40V	28V	40V
SK35	SK35	50V	35V	50V
SK36	SK36	60V	42V	60V
SK38	SK38	80V	56V	80V
SK310	SK310	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_L=100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	100A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	0.50V 0.75V 0.85V	$I_{FM}=3.0A$ ; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1mA 10mA	$T_J=25^\circ\text{C}$ ; $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	250pF	Measured at 1.0MHz, $V_R=4.0V$

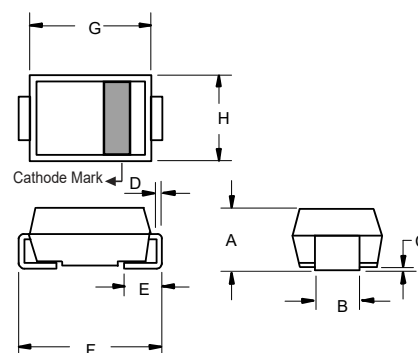
\*Pulse Test: Pulse Width 200  $\mu\text{sec}$ , Duty Cycle 2%

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.

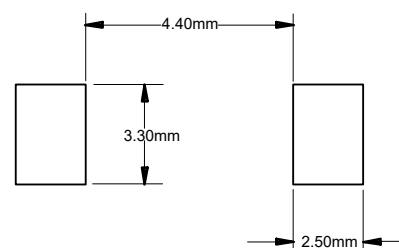
# 3 Amp Schottky Rectifier 20 to 100 Volts

## 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

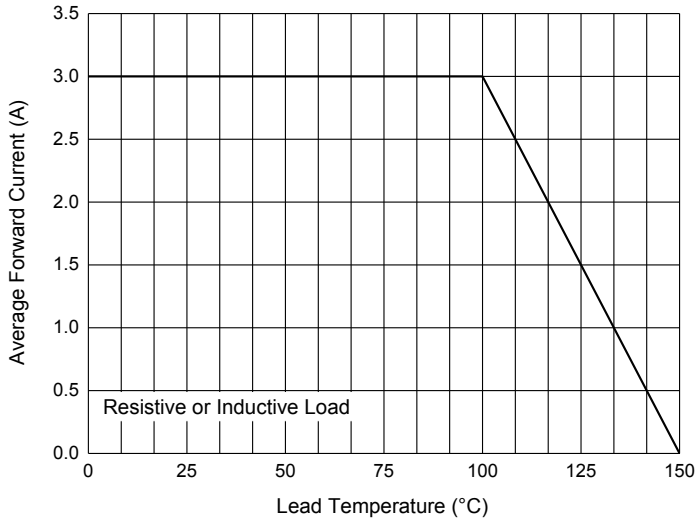


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

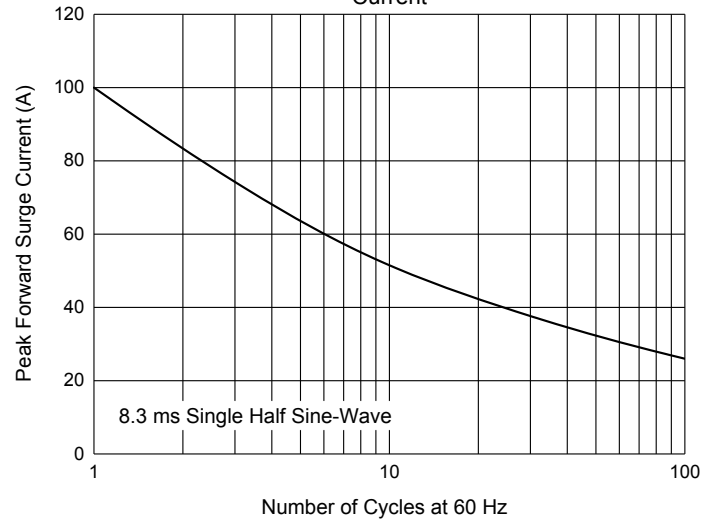


Fig. 3 - Typical Instantaneous Forward Characteristics

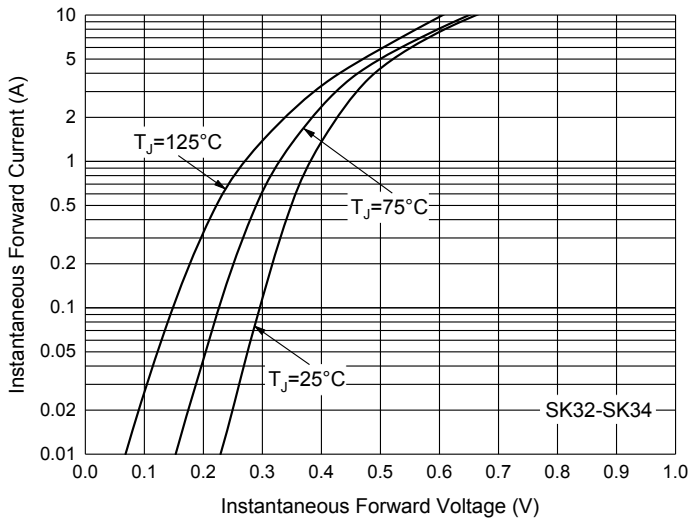


Fig. 4 - Typical Instantaneous Forward Characteristics

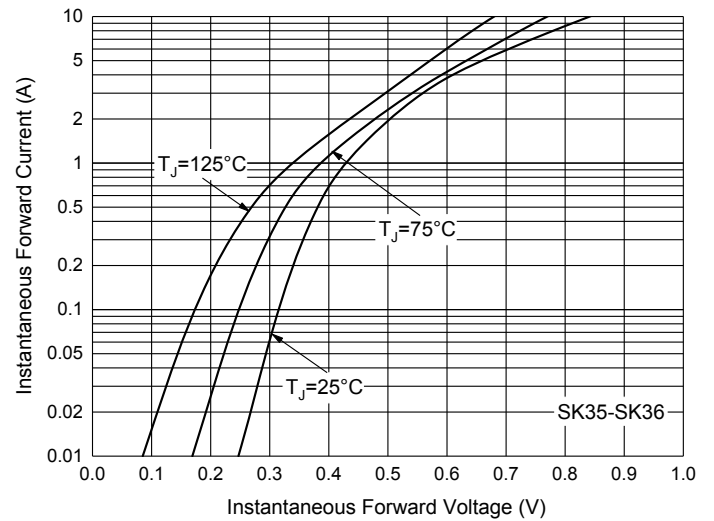


Fig. 5 - Typical Instantaneous Forward Characteristics

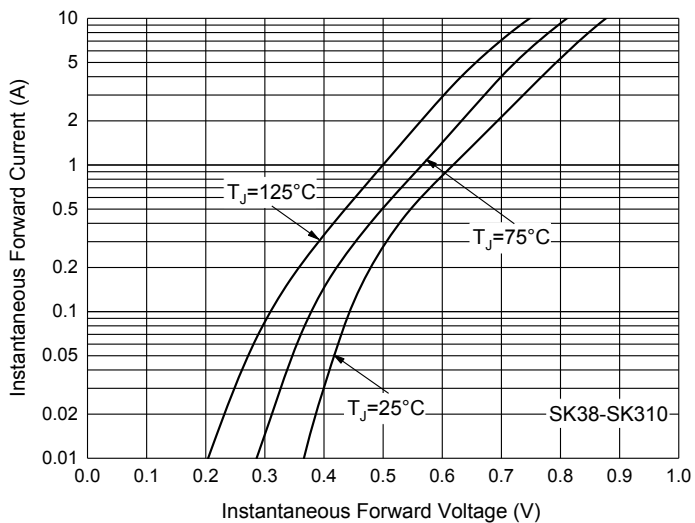
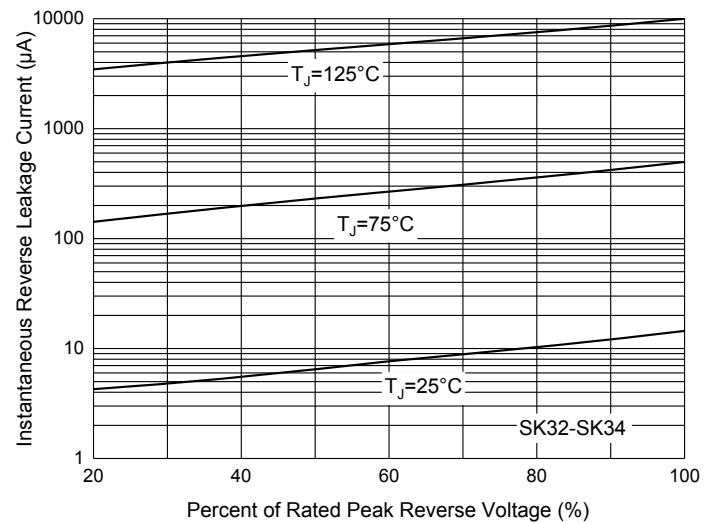


Fig. 6 - Typical Reverse Leakage Characteristics



## Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

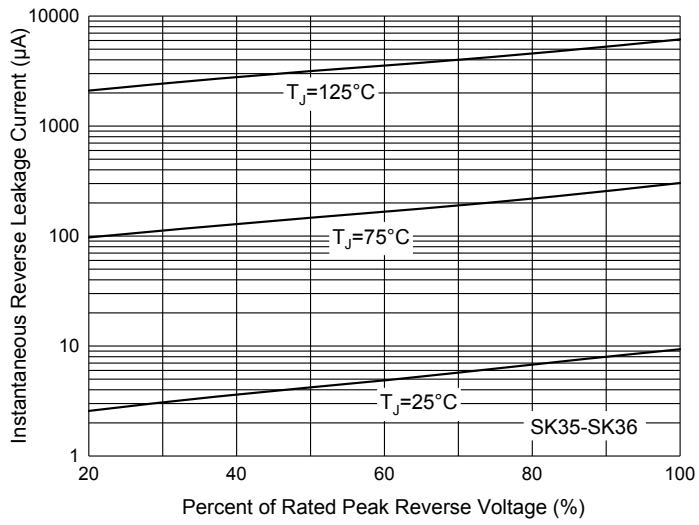
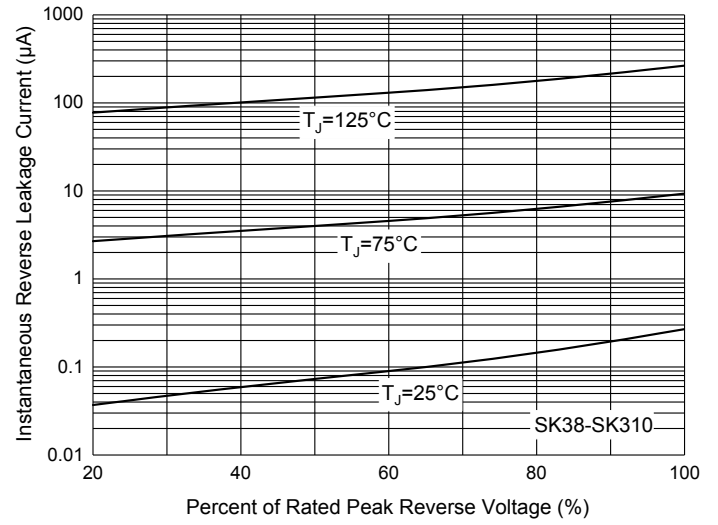


Fig. 8 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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