



**THE DATASHEET OF  
SK810LHE3-TP**



## Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- High Current Capability
- Low Forward Voltage
- For Surface Mount Application
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- 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
- 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
SK82LHE3	SK82	20V	14V	20V
SK84LHE3	SK84	40V	28V	40V
SK86LHE3	SK86	60V	42V	60V
SK810LHE3	SK810	100V	70V	100V

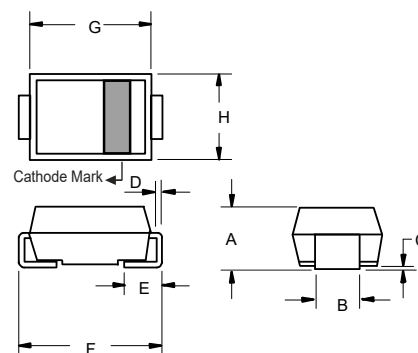
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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	$V_F$	0.65V	$I_{FM}=8.0A;$ $T_J=25^\circ\text{C}$
SK82LHE3-86LHE3 SK810LHE3		0.80V	
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	$C_J$	400pF	Measured at 1.0MHz, $V_R=4.0V$

- Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.  
2. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.  
3. Mounted on P.C.B. With 0.6" x 0.6" (16 mm x 16 mm) Copper Pad Areas

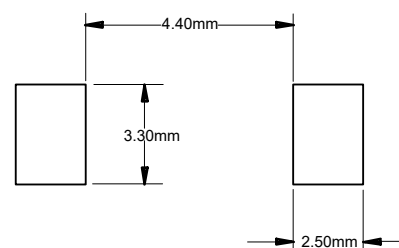
# 8.0 Amp Schottky Rectifier 20 to 100 Volts

## SMC (DO-214AB)



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

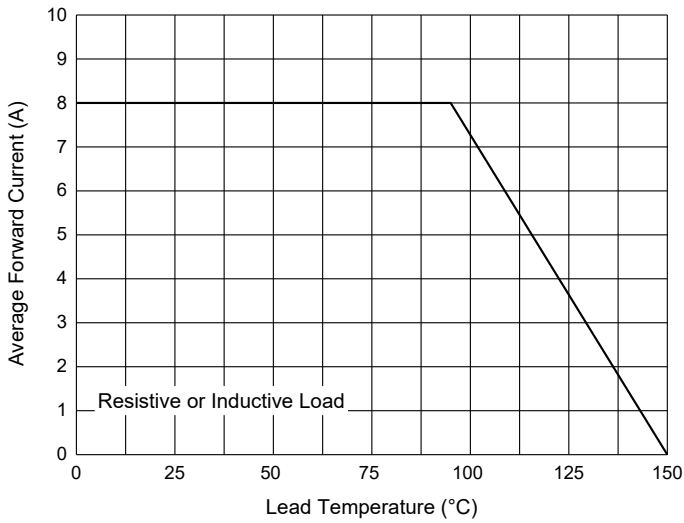


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

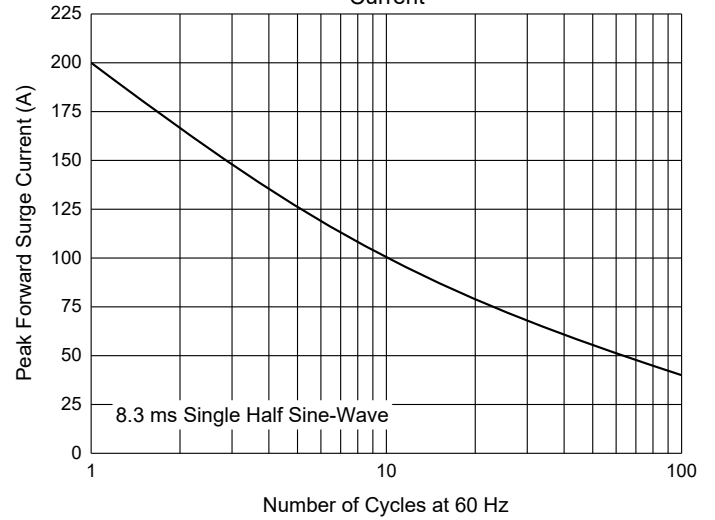


Fig. 3 - Typical Instantaneous Forward Characteristics

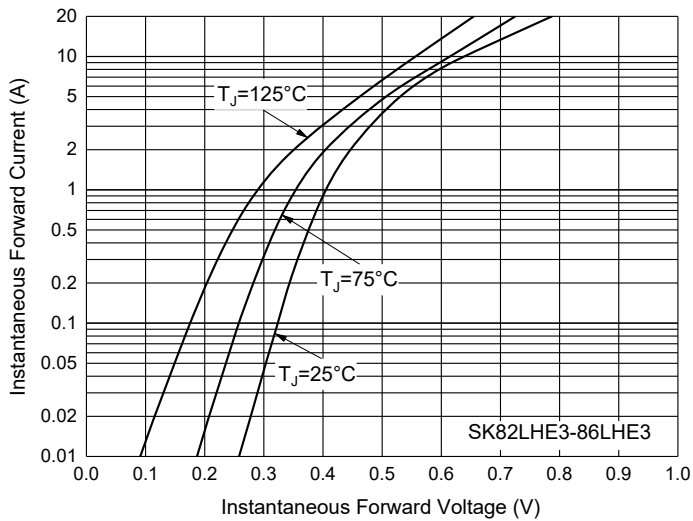


Fig. 4 - Typical Instantaneous Forward Characteristics

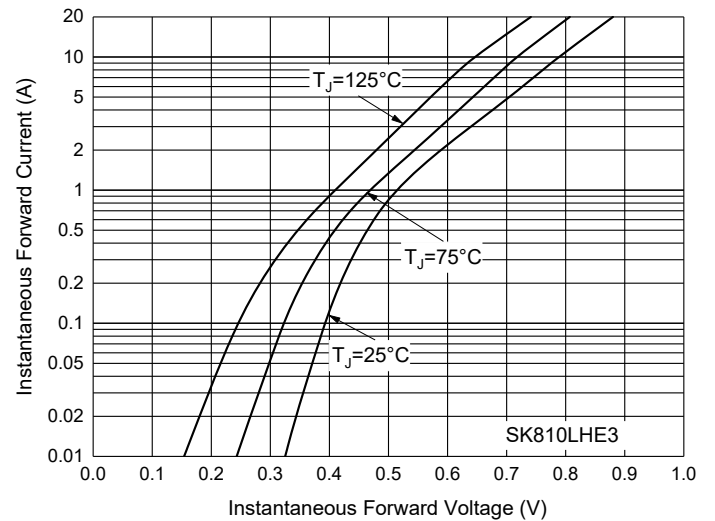


Fig. 5 - Typical Reverse Leakage Characteristics

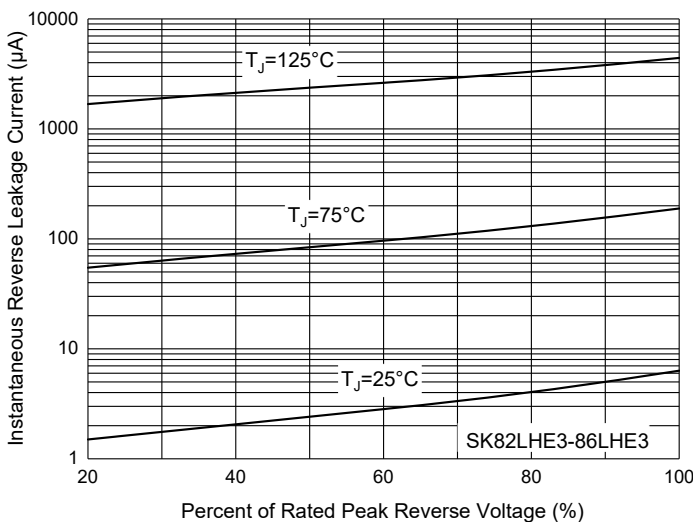
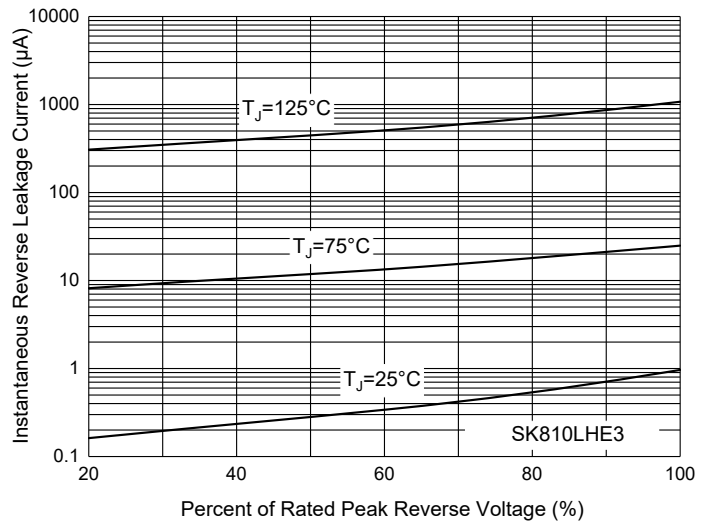


Fig. 6 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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