

#### **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 Current Capability With Low Forward Voltage
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- 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
SK52A-L	SK52A	20V	14V	20V
SK53A-L	SK53A	30V	21V	30V
SK54A-L	SK54A	40V	28V	40V
SK55A-L	SK55A	50V	35V	50V
SK56A-L	SK56A	60V	42V	60V
SK58A-L	SK58A	80V	56V	80V
SK510A-L	SK510A	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

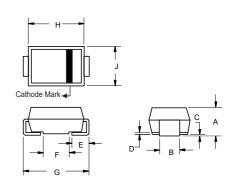
Average Forward Current	I <sub>F(AV)</sub>	5.0A	T <sub>A</sub> =120°C
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SK52A-54A SK55A-56A SK58A-510A	V <sub>F</sub>	0.55V 0.75V 0.85V	I <sub>FM</sub> =5.0A; T <sub>J</sub> =25°C*
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25°C; T <sub>J</sub> =100°C
Typical Junction Capacitance	Сл	200pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse test: Pulse width 200  $\mu sec,$  Duty cycle 2% 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.

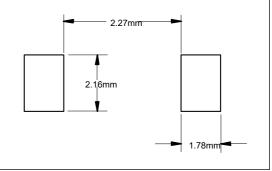
# 5 Amp Schottky Rectifier 20 to 100 Volts

# **SMA (DO-214AC)**



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.075	0.096	1.90	2.44		
В	0.050	0.064	1.27	1.63		
С	0.002	0.008	0.051	0.203		
D		0.020		0.51		
E	0.030	0.060	0.76	1.52		
F	0.065	0.091	1.65	2.32		
G	0.189	0.220	4.80	5.59		
Н	0.157	0.187	4.00	4.75		
J	0.090	0.115	2.25	2.92		

### SUGGESTED SOLDER PAD LAYOUT





## **Curve Characteristics**

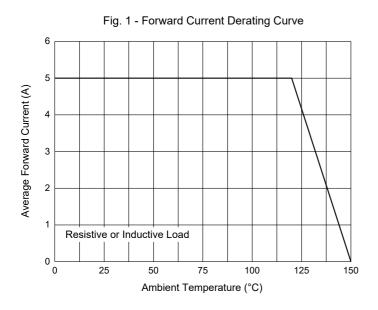


Fig. 3 - Typical Instantaneous Forward Characteristics

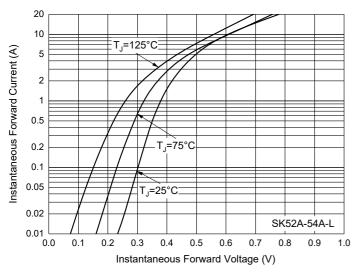


Fig. 5 - Typical Instantaneous Forward Characteristics

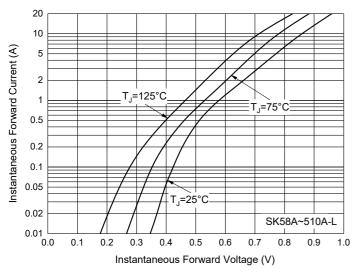


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

120
80
60
40
8.3 ms Single Half Sine-Wave

Fig. 4 - Typical Instantaneous Forward Characteristics

Number of Cycles at 60 Hz

100

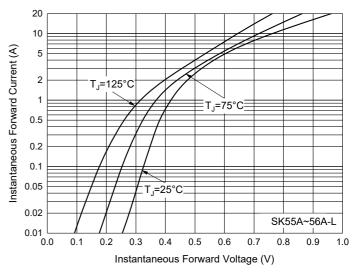
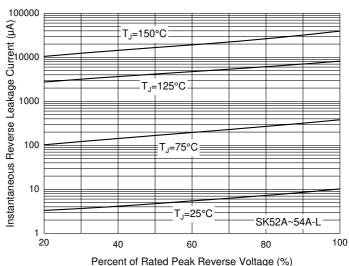


Fig. 6 - Typical Reverse Leakage Characteristics





# **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

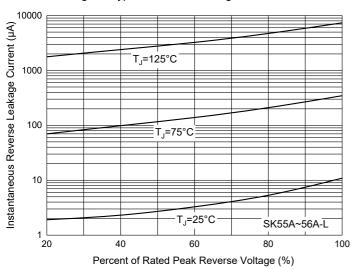
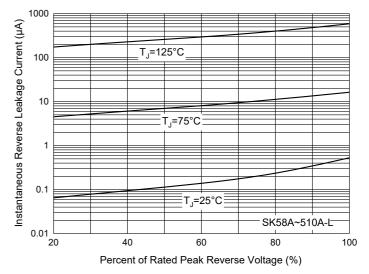


Fig. 8 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing	
SK52A-LTP~SK510A-LTP	Tape&Reel: 5Kpcs/Reel	

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