

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- · High Current Capability
- For Surface Mount Application
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# **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
SK52L	SK52	20V	14V	20V
SK53L	SK53	30V	21V	30V
SK54L	SK54	40V	28V	40V
SK55L	SK55	50V	35V	50V
SK56L	SK56	60V	42V	60V
SK58L	SK58	80V	56V	80V
SK510L	SK510	100V	70V	100V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

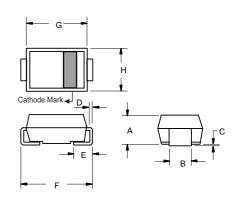
Average Forward Current	I <sub>F(AV)</sub>	5.0A	T <sub>C</sub> =120°C
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SK52L~54L SK55L~56L SK58L~510L	V <sub>F</sub>	0.55V 0.75V 0.85V	I <sub>FM</sub> =5.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current 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	CJ	200pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse Test: Pulse Width 200 µsec, Duty Cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

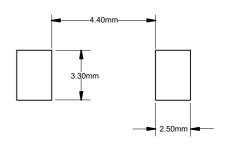
# 5 Amp Schottky Rectifier 20 to 100 Volts

# SMC (DO-214AB)



DIMENSIONS						
DIM	INCHES		MM		NOTE	
ווועו	MIN	MAX	MIN	MAX	NOTE	
Α	0.079	0.103	2.00	2.62		
В	0.108	0.128	2.75	3.25		
С	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		
Н	0.220	0.245	5.59	6.22		

### Suggested Solder Pad Layout





#### **Curve Characteristics**

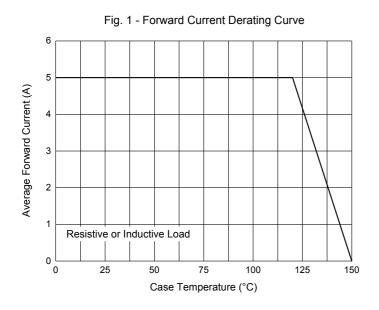


Fig. 3 - Typical Instantaneous Forward Characteristics

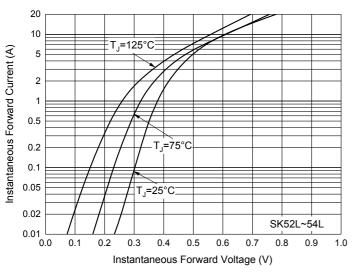


Fig. 5 - Typical Instantaneous Forward Characteristics

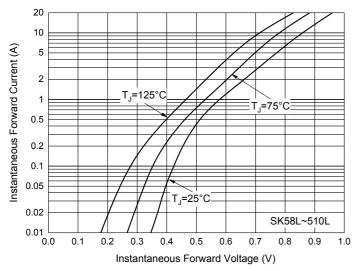


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

120

80

80

40

40

8.3 ms Single Half Sin

0

1 10 100

Number of Cycles at 60 Hz

Fig. 4 - Typical Instantaneous Forward Characteristics

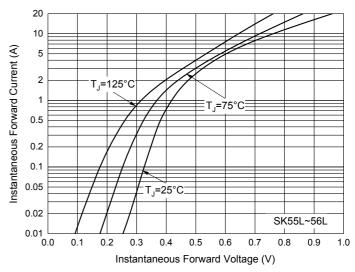
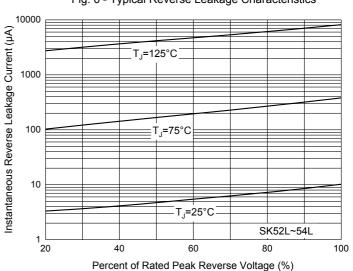


Fig. 6 - Typical Reverse Leakage Characteristics





# **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

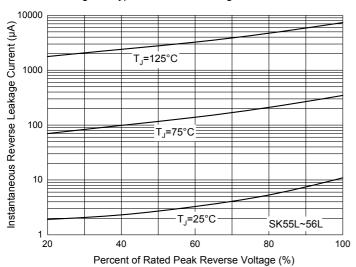
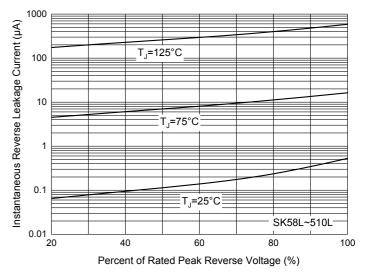


Fig. 8 - Typical Reverse Leakage Characteristics





# **Ordering Information**

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

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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