

#### **Features**

- High Surge Capability
- Low Forward Voltage Drop
- Halogen Free. "Green" Device (Note 1)
- Low Power Losses, High Efficiency
- 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 +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 14°C/W Junction to Lead
- Maximum Thermal Resistance: 50°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK42L	SK42L	20V	14V	20V
SK43L	SK43L	30V	21V	30V
SK44L	SK44L	40V	28V	40V

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	4.0A	T <sub>L</sub> =90°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.45V	I <sub>FM</sub> =4.0A; 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

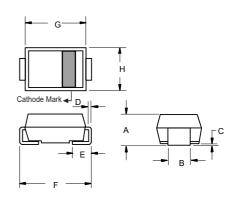
<sup>\*</sup>Pulse Test: Pulse Width 300  $\mu$ sec, Duty Cycle 1%

#### 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.

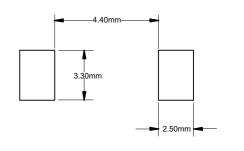
# 4 Amp Schottky Rectifier 20 to 40 Volts

## SMC (DO-214AB)



DIMENSIONS								
DIM	INCHES		MM		NOTE			
DIIVI	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				
Е	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**

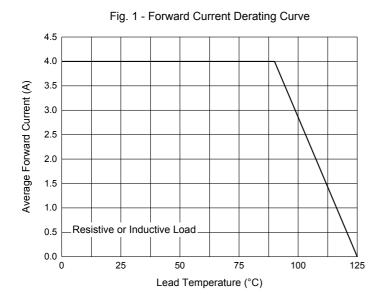


Fig. 3 - Typical Instantaneous Forward Characteristics

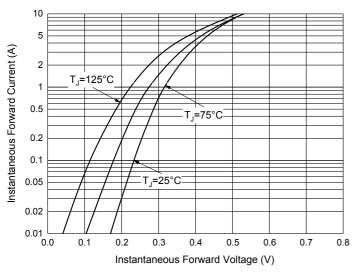
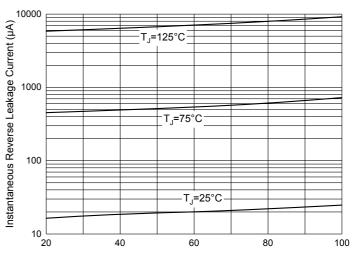


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

175
150
150
100
100
75
8.3 ms Single Half Sine-Wave
0
1 10 100
Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics



Percent of Rated Peak Reverse Voltage (%)



### **Ordering Information**

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

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