

Micro Commercial Components



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SK52L THRU SK510L

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- High Current Capability
- For Surface Mount Applications
- Higher Temp Soldering : 260°C for 10 Seconds At Terminals
- Available on Tape and Reel
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 16°C/W Junction To Lead
 55°C/W Junction To Ambient

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Reccurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		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

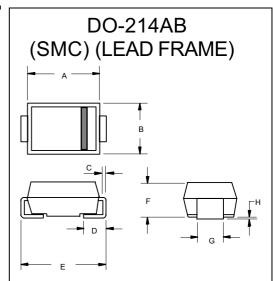
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	T _A = 120°C
Peak Forward Surge Current	I _{FSM}	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage			
SK52L~54L SK55L~56L SK58L~510L	V_{F}	.55V .75V .85V	I _{FM} = 5.0A; T _J = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	1.0mA 20mA	T _J = 25°C T _J = 100°C
Typical Junction Capacitance	CJ	200pF	Measured at 1.0MHz, V _R =4.0V

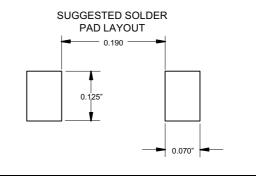
^{*}Pulse test: Pulse width 200 µsec, Duty cycle 2%

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

5 Amp Schottky Rectifier 20 to 100 Volts



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.260	.280	6.60	7.11		
В	.220	.245	5.59	6.22		
С	.006	.012	0.15	0.31		
D	.030	.060	0.76	1.52		
E	.305	.320	7.75	8.13		
F	.079	.103	2.00	2.62		
G	.108	.128	2.75	3.25		
Н	.002	.008	0.050	0.203		



SK52L thru SK510L

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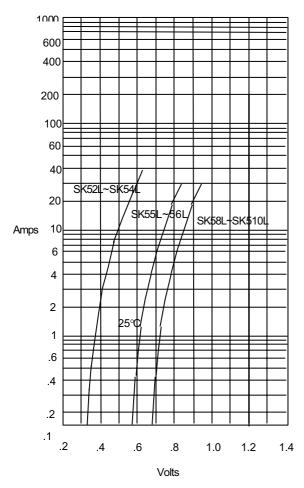
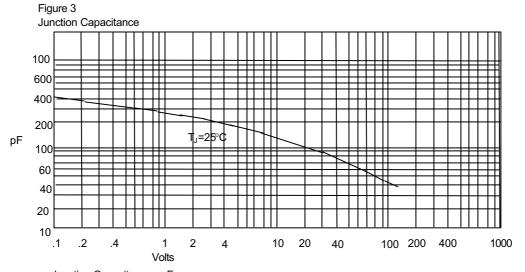


Figure 2 Forward Derating Curve 5 4 3 Amps 2 Single Phase, Half Wave 60Hz Resistive or Inductive Load ⁰60 80 100 120 140 160 180 °С

> Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts



Junction Capacitance - pF versus Reverse Voltage - Volts

SK52L thru SK510L



Figure 4
Typical Reverse Characteristics

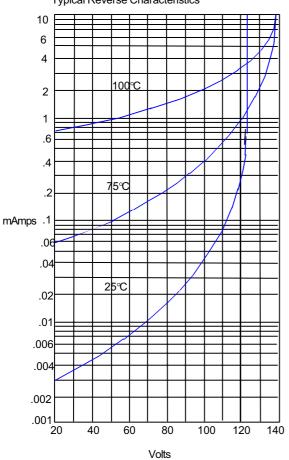


Figure 5
Peak Forward Surge Current

150
125
100
75
Amps
50
25
0
1 2 4 6 8 10 20 40 60 80100

Cycles

Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts



Ordering Information :

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

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