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## SK52A-L THRU SK510A-L

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS 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 available upon request by adding suffix "-HF"

#### **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

	Device	Maximum	Maximum	Maximum
Part	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage	_	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

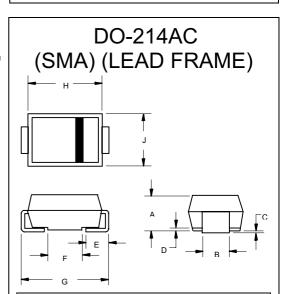
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

<u> </u>	HOU G EU U		uioi mioo opooiiiou
Average Forward Current	$I_{F(AV)}$	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	$V_{F}$	.55V .75V .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>	1mA 20mA	T <sub>J</sub> = 25°C T <sub>J</sub> = 100°C
Typical Junction Capacitance	C <sub>J</sub>	200pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

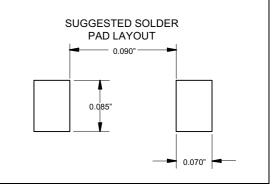
<sup>\*</sup>Pulse test: Pulse width 200 usec, Duty cycle 2%

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

## 5 Amp Schottky Rectifier 20 to 100 Volts



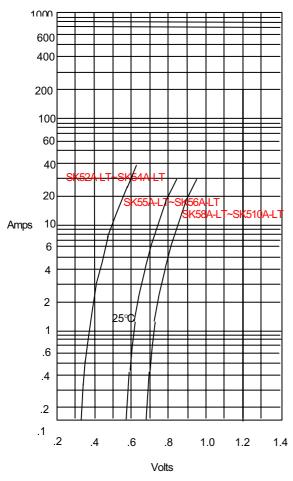
DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.079	.096	2.00	2.44			
В	.050	.064	1.27	1.63			
С	.002	.008	.05	.20			
D		.02	-	.51			
Е	.030	.060	.76	1.52			
F	.065	.091	1.65	2.32			
G	.189	.220	4.80	5.59			
Н	.157	.181	4.00	4.60			
J	.090	.115	2.25	2.92			





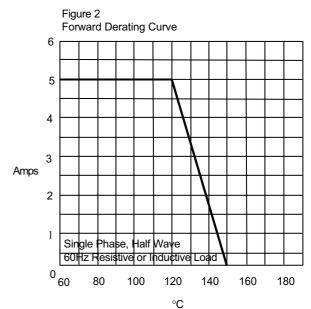
## SK52A-L thru SK510A-L

Figure 1
Typical Forward Characteristics

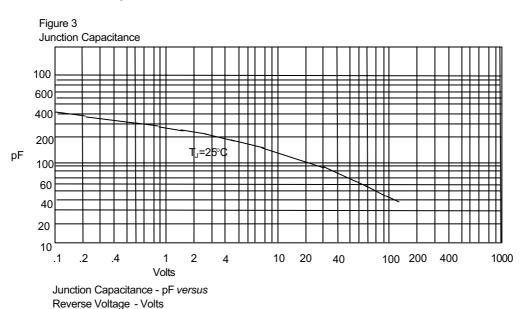


Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

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Average Forward Rectified Current - Amperes versus Ambient Temperature -  $^{\circ}\text{C}$ 





### SK52A-L thru SK510A-L

# **SHUNRONG**

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Figure 4
Typical Reverse Characteristics

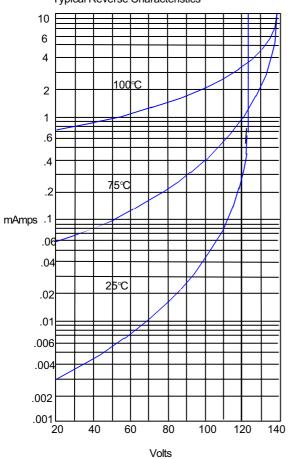


Figure 5 Peak Forward Surge Current 150 125 100 75 Amps 50 25 0 60 80100 20 4 6 8 10 40 Cycles

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



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#### **Ordering Information:**

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

Note: Adding "-HF" suffix for halogen free, eg. SK52A-LTP-HF~SK510A-LTP-HF