



Micro Commercial Components  
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# SK52L THRU SK510L

## Features

- High Current Capability
- For Surface Mount Applications
- Higher Temp Soldering : 250°C for 10 Seconds At Terminals
- Available on Tape and Reel

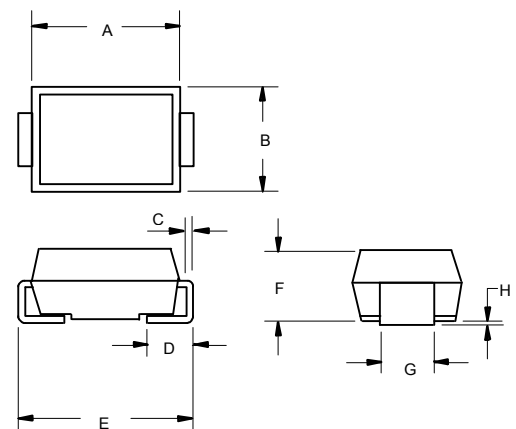
## 5 Amp Schottky Rectifier 20 to 100 Volts

## 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 Catalog 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

## DO-214AB (SMCJ) (LEAD FRAME)

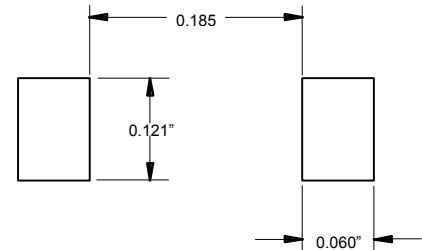


## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	$T_A = 120^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.55V .75V .85V	$I_{FM} = 5.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA 20mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	200pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.260	.280	6.60	7.11	
B	.220	.245	5.59	6.22	
C	.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	
H	.002	.008	0.050	0.203	

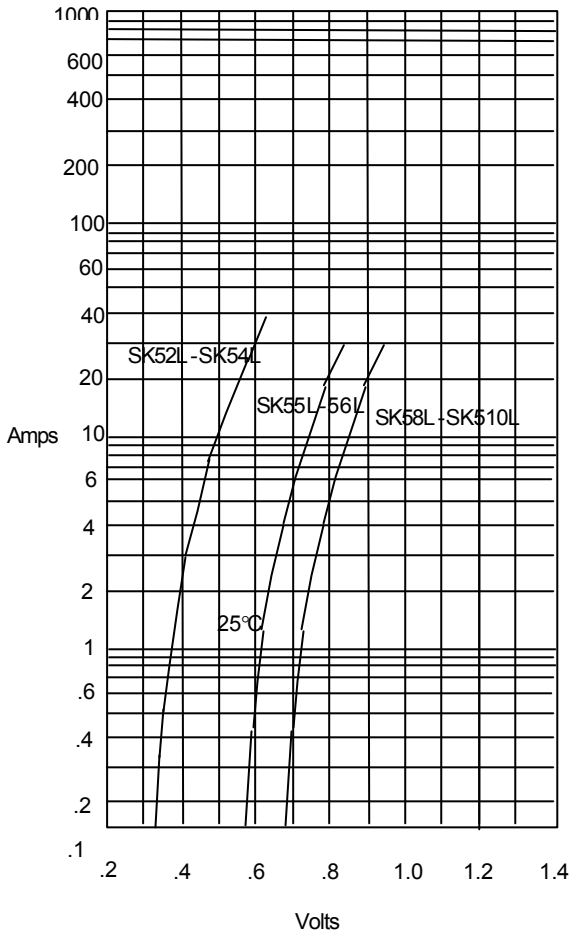
### SUGGESTED SOLDER PAD LAYOUT



\*Pulse test: Pulse width 200  $\mu\text{sec}$ , Duty cycle 2%

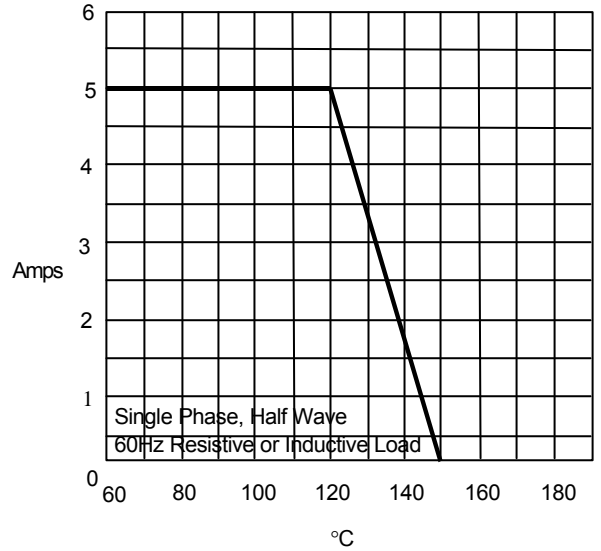
# SK52L thru SK510L

Figure 1  
Typical Forward Characteristics



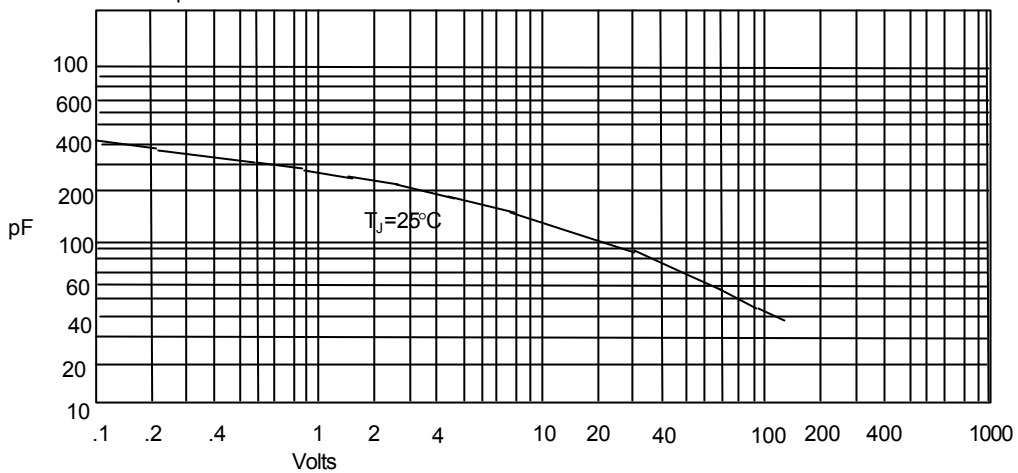
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

Figure 3  
Junction Capacitance

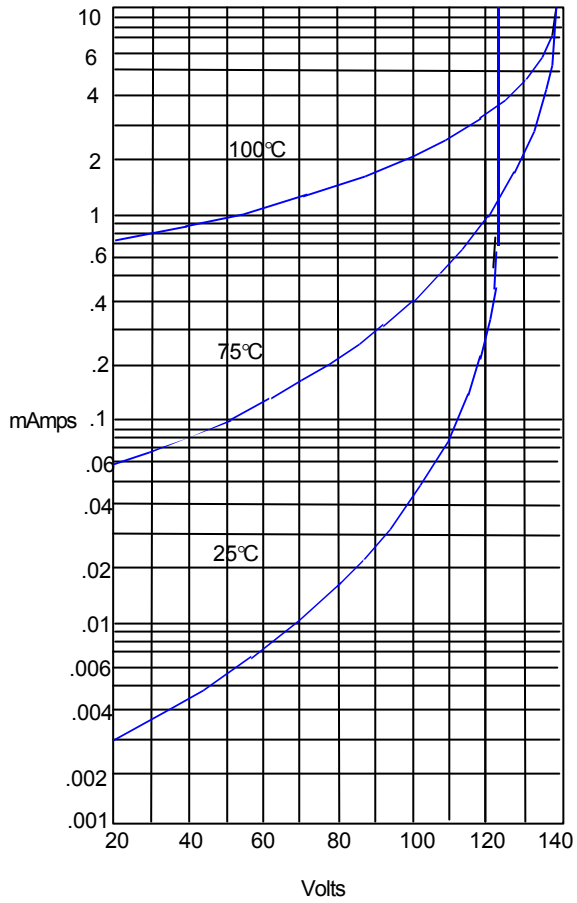


Junction Capacitance - pF versus  
Reverse Voltage - Volts

# SK52L thru SK510L

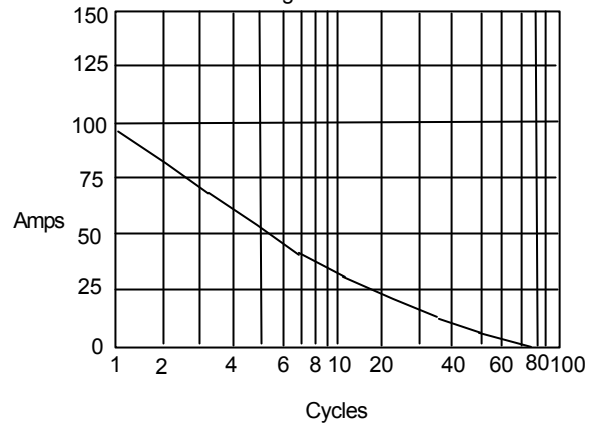


Figure 4  
Typical Reverse Characteristics



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

Figure 5  
Peak Forward Surge Current



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