

# SK82L THRU SK810L

## 8.0 Amp Schottky Rectifier 20 to 100 Volts

### Features

- High Current Capability
- Low Forward Voltage
- For Surface Mount Application
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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
- Typical Thermal Resistance: 18°C/W Junction to Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK82L	SK82	20V	14V	20V
SK83L	SK83	30V	21V	30V
SK835L	SK835	35V	24.5V	35V
SK84L	SK84	40V	28V	40V
SK845L	SK845	45V	31.5V	45V
SK86L	SK86	60V	42V	60V
SK88L	SK88	80V	56V	80V
SK810L	SK810	100V	70V	100V

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

Average Forward Current	$I_{F(AV)}$	8.0A	$T_J=95^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	200A	8.3ms half sine
Maximum Instantaneous Forward Voltage SK82L-86L SK88L-810L	$V_F$	.65V .80V	$I_{FM}=8.0A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1mA 20mA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	400pF	Measured at 1.0MHz, $V_R=4.0V$

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

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

The drawing shows a top view with dimensions A (width) and B (height). A side view shows dimensions C (lead thickness), D (lead width), E (total width), F (height), G (lead length), and H (lead height).

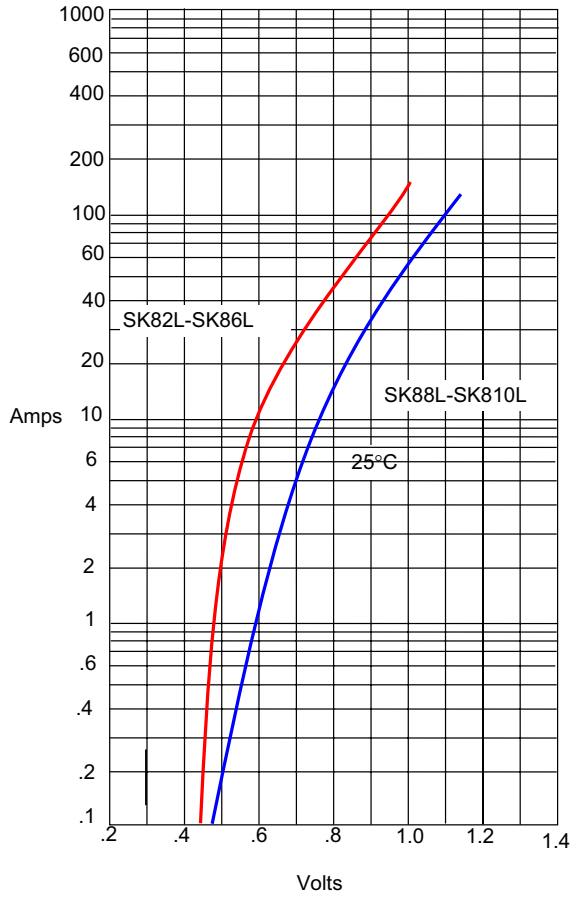
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.260	.280	6.60	7.11	
B	.220	.245	5.59	6.22	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.305	.320	7.75	8.13	
F	.079	.103	2.00	2.62	
G	.108	.128	2.75	3.25	
H	.002	.008	0.050	0.203	

#### SUGGESTED SOLDER PAD LAYOUT

The diagram shows two rectangular solder pads. The distance between the inner edges of the pads is 0.190. The height of each pad is 0.125. The distance from the inner edge of each pad to its outer edge is 0.070.

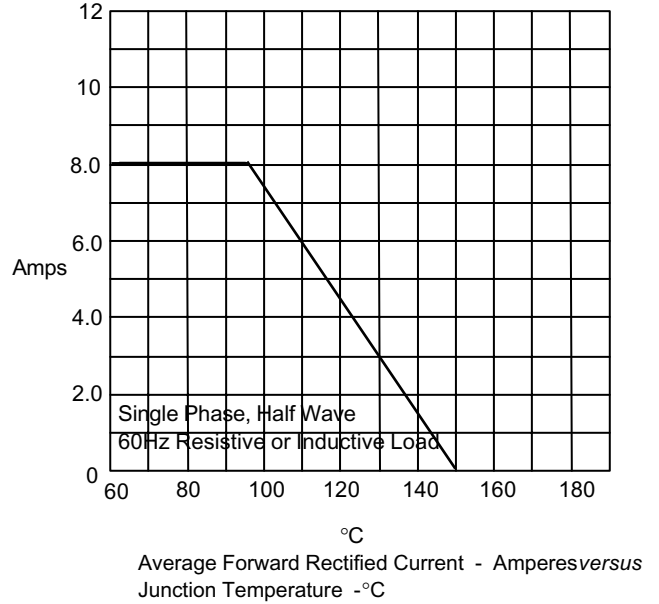
# SK82L thru SK810L

Figure 1  
Typical Forward Characteristics



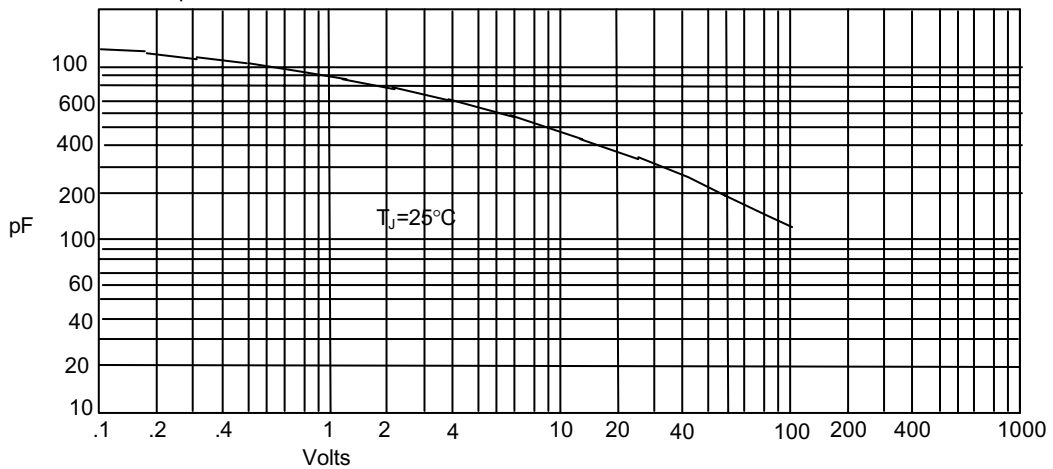
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

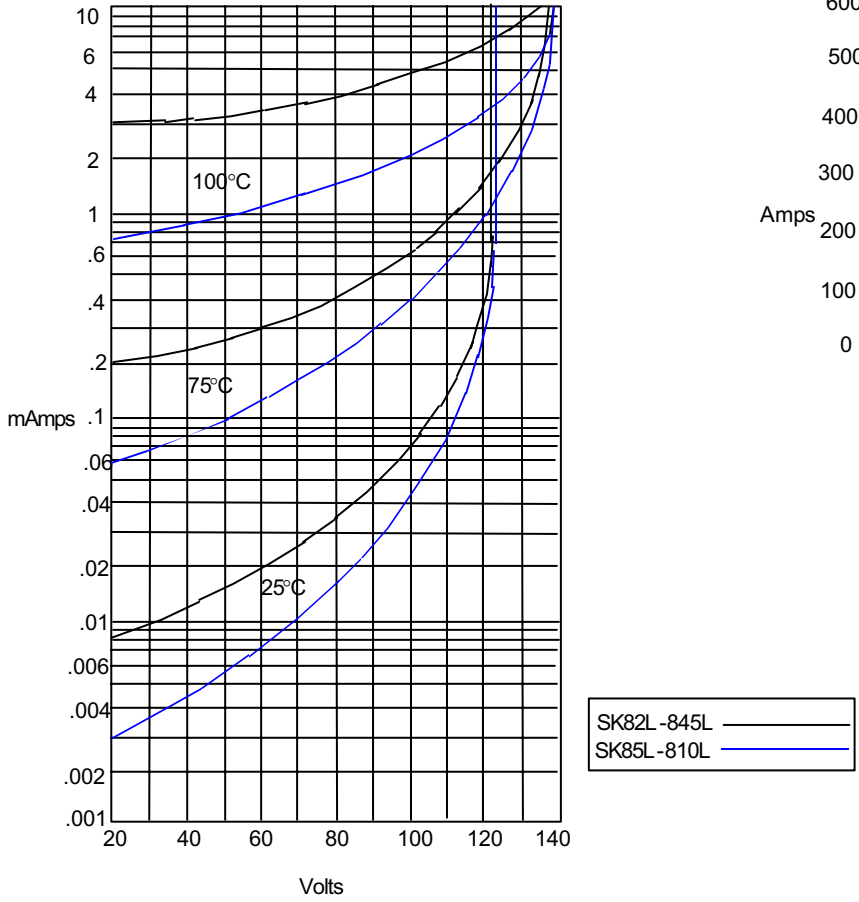
Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

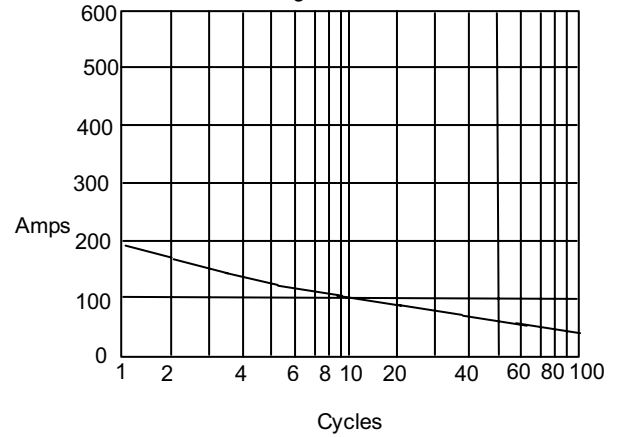
# SK82L thru SK810L

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



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### 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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