

# SK32 THRU SK310

## Features

- Same Electrical Characteristics As The SMC Version
- Very Low Cost
- Can Be Up To 50% Smaller Than The SMC To Save Precious Board Space
- High Current Capability With Low Forward Voltage
- For Surface Mount Applications
- Gull Wing, Or DO215AC Version, Available

## Maximum Ratings

- Operating Temperature: -50°C to +125°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 10°C/W Junction To Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK32A	SK32A	20V	14V	20V
SK33A	SK33A	30V	21V	30V
SK34A	SK34A	40V	28V	40V
SK35A	SK35A	50V	35V	50V
SK36A	SK36A	60V	42V	60V
SK38A	SK38A	80V	56V	80V
SK310A	SK310A	100V	70V	100V

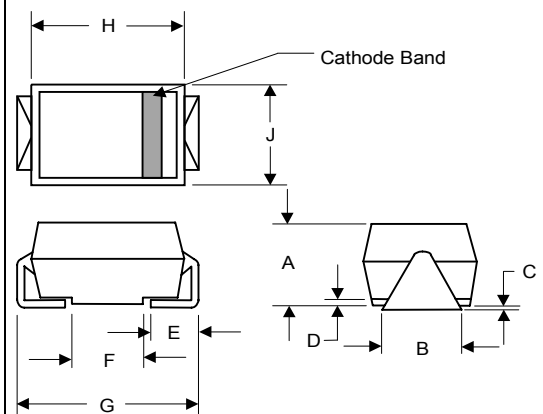
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_J = 120^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.50V .75V .85V	$I_{FM} = 3.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	.5mA 20mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	45pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

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

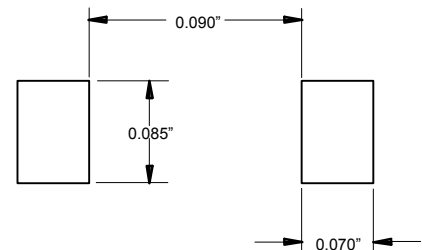
## 3 Amp Schottky Rectifier 20 to 100 Volts

### DO-214AC (SMAJ) (High Profile)



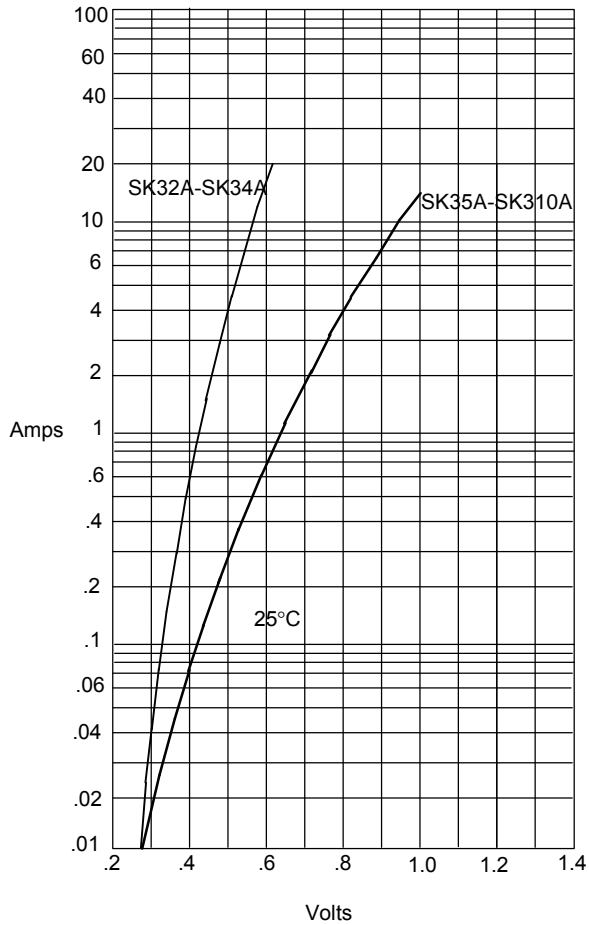
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.067	.089	1.70	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.065	.89	1.40	
F	.065	.096	1.65	2.45	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	

### SUGGESTED SOLDER PAD LAYOUT



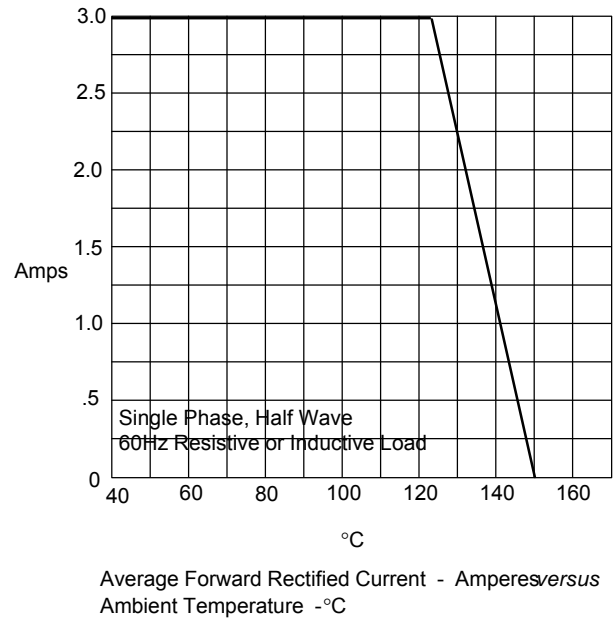
# SK32 THRU SK310

Figure 1  
Typical Forward Characteristics



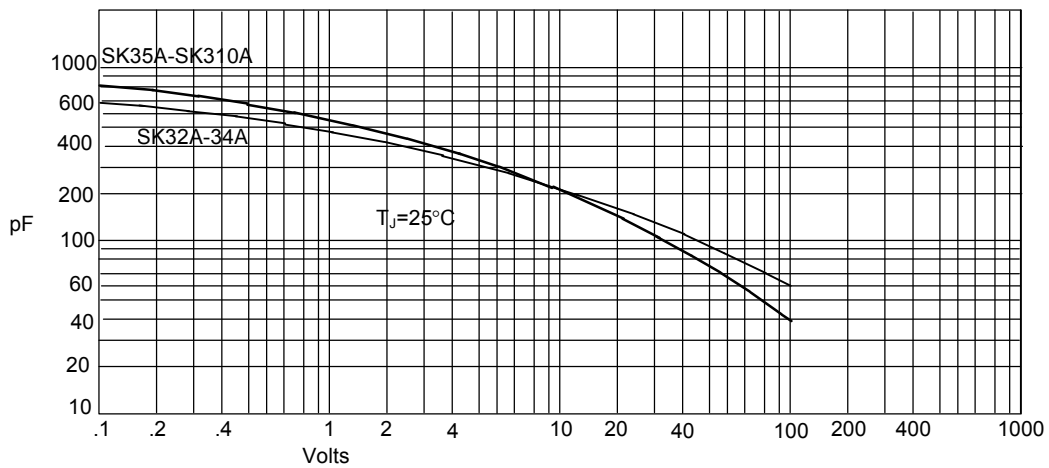
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

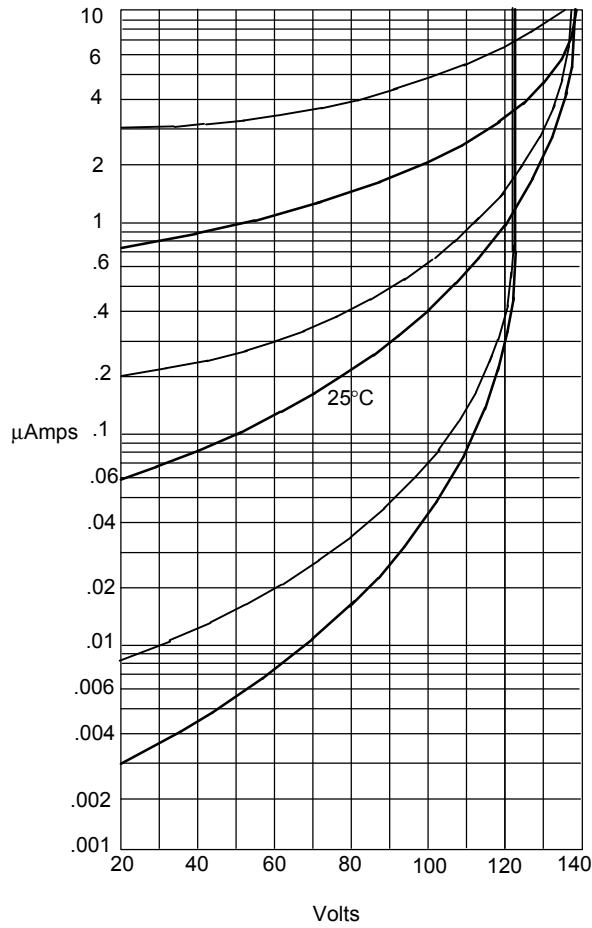
Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

# SK32 THRU SK310

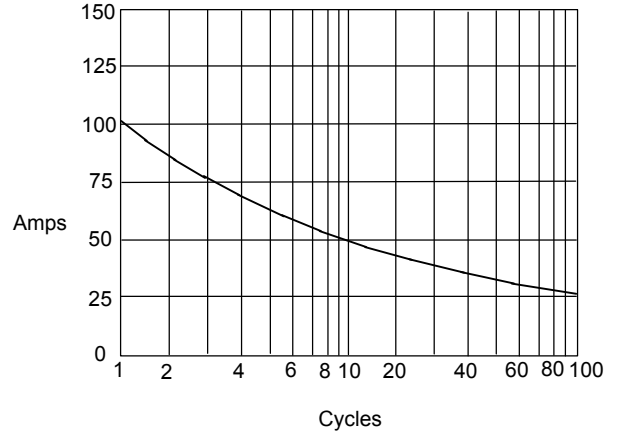
Figure 4  
Typical Reverse Characteristics



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

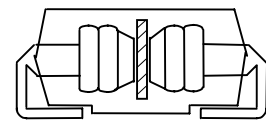
SK32A-34A ———  
SK35A-310A ———

Figure 5  
Peak Forward Surge Current



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

Figure 6  
New SMA Assembly



Round Lead