

# SK22 THRU SK210

## Features

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- Reverse Energy Tested
- High Current Capability
- Extremely Low Thermal Resistance

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK22	SK22	20V	14V	20V
SK23	SK23	30V	21V	30V
SK24	SK24	40V	28V	40V
SK25	SK25	50V	35V	50V
SK26	SK26	60V	42V	60V
SK28	SK28	80V	56V	80V
SK210	SK210	100V	70V	100V

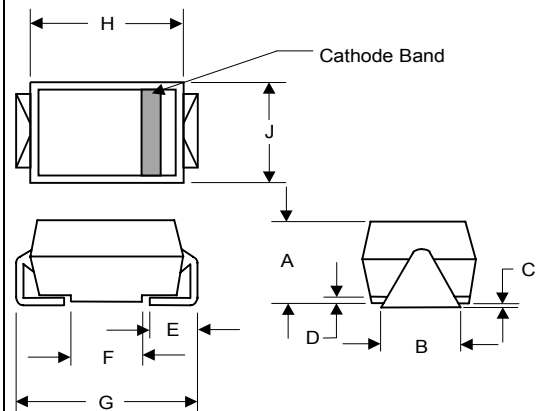
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_J = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.55V .70V .85V	$I_{FM} = 2.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5 mA	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	230pF 50pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

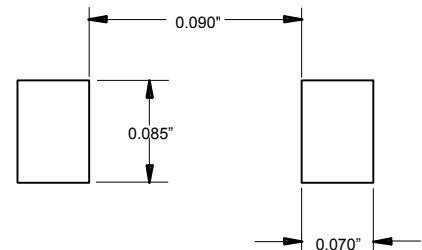
## 2 Amp Schottky Rectifier 20 to 100 Volts

### DO-214AA (SMBJ) (Round Lead)



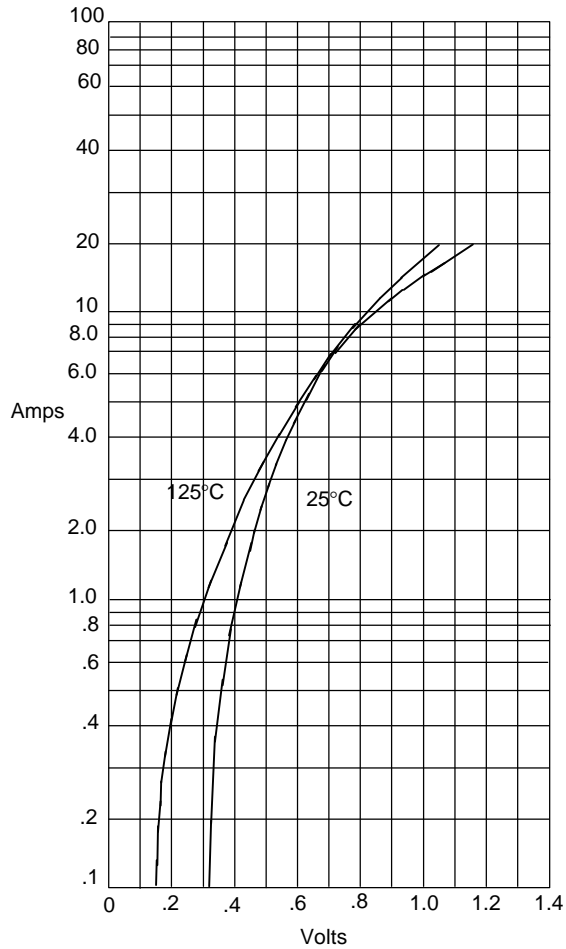
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.075	.089	1.90	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.055	.90	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

### SUGGESTED SOLDER PAD LAYOUT



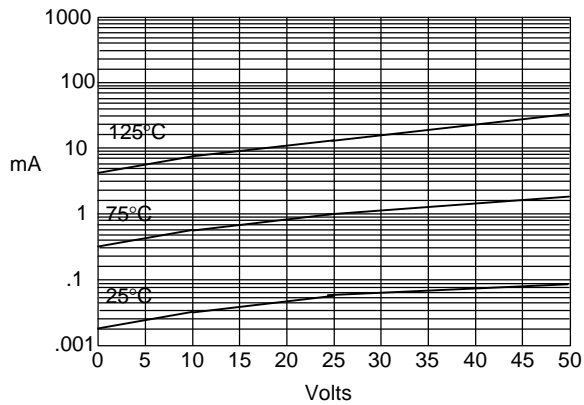
# SK22 THRU SK210

Figure 1  
Typical Forward Characteristics



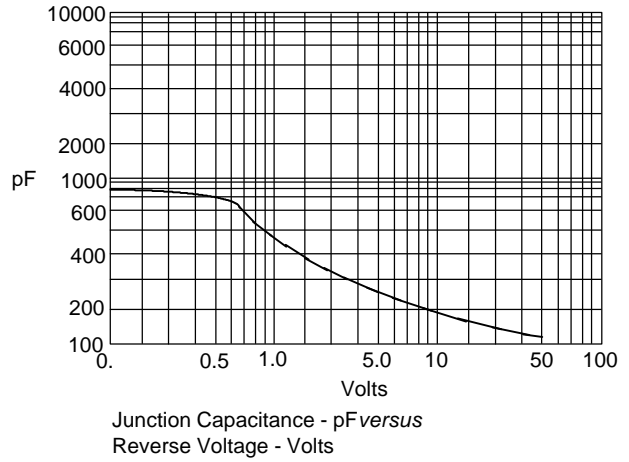
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



Typical Reverse Current - mA versus  
Reverse Voltage - Volts

Figure 3  
Typical Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

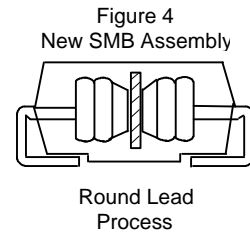


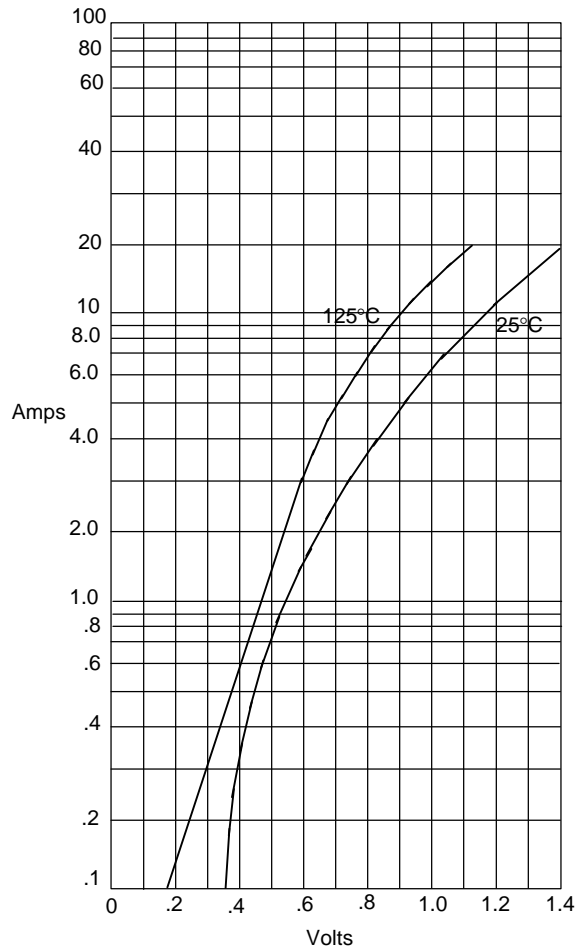
Figure 4

New SMB Assembly

Round Lead  
Process

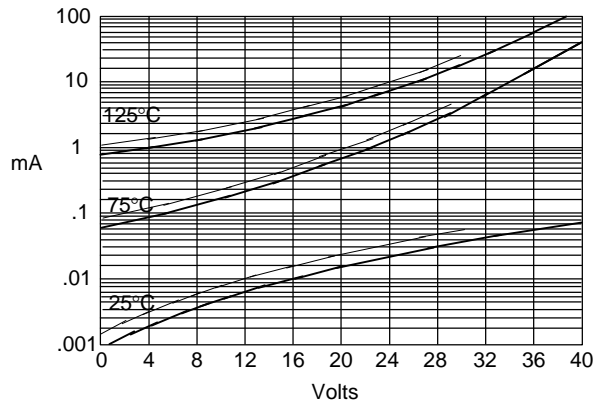
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Typical Forward Characteristics



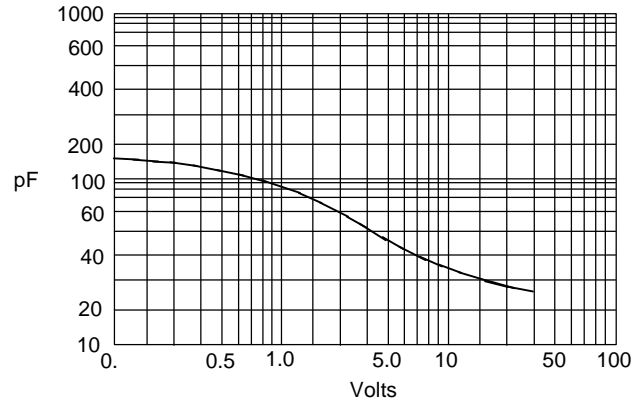
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Figure 2  
Typical Reverse Characteristics



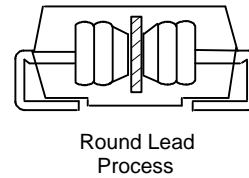
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Junction Capacitance - pF versus  
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