# NOT RECOMMENDED FOR NEW DESIGNS USE SK12-LTP~SK110-LTP SERIES





Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

# SK12 THRU SK110

### **Features**

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Low Forward Voltage
- Guard Ring Protection
- High Current Capability
- Low Thermal Resistance
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### **Maximum Ratings**

- Operating Temperature(Tj): -55°C to +125°C
- Storage Temperature(Tstg): -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

MCC Catalog	Device Marking	Maximum Recurrent	Maximum RMS	Maximum DC
Number		Peak Reverse Voltage	Voltage	Blocking Voltage
SK12	SK12	20V	14V	20V
SK13	SK13	30V	21V	30V
SK14	SK14	40V	28V	40V
SK15	SK15	50V	35V	50V
SK16	SK16	60V	42V	60V
SK18	SK18	80V	56V	80V
SK110	SK110	100V	70V	100V

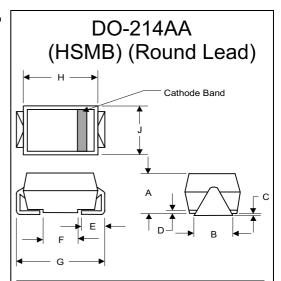
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	I <sub>F(AV)</sub>	1.0A	T <sub>J</sub> = 90°C
Current			
Peak Forward Surge	I <sub>FSM</sub>	30A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
SK12	$V_{F}$	.45V	$I_{FM} = 1.0A;$
SK13		.55V	T <sub>a</sub> = 25°C*
SK14		.60V	u u
SK15-16		.72V	
SK18-110		.85V	
Maximum DC Reverse	1	0.5mA	T - 050C
Current At Rated DC	I <sub>R</sub>		T <sub>A</sub> = 25°C
Blocking Voltage		20mA	T <sub>A</sub> = 100°C
Typical Junction			
Capacitance			
. SK12	CJ	110pF	Measured at
SK13-SK110		30pF	1.0MHz, V <sub>R</sub> =4.0V

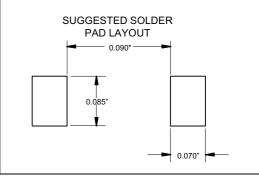
<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

# 1 Amp Schottky Rectifier 20 to 100 Volts



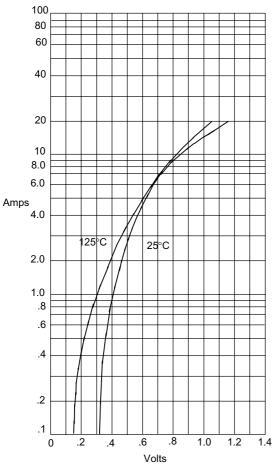
DIMENSIONS						
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.078	.116	1.98	2.95		
В	.075	.089	1.90	2.25		
O	.002	.008	.05	.20		
D		.02		.51		
Ш	.035	.055	.90	1.40		
Ŧ	.065	.091	1.65	2.32		
G	.205	.224	5.21	5.69		
Н	.160	.180	4.06	4.57		
J	.130	.155	3.30	3.94		



## **SK12**

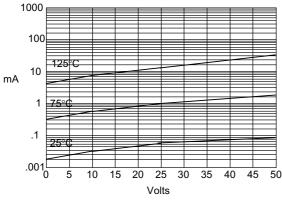


Figure 1 Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



Typical Reverse Current - mAversus Reverse Voltage - Volts

### SK13 thru SK110

·*M*·*C*·*C*·

Figure 1 Typical Forward Characteristics

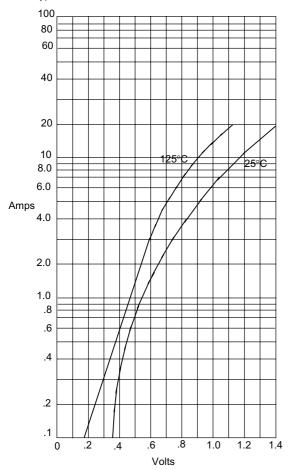
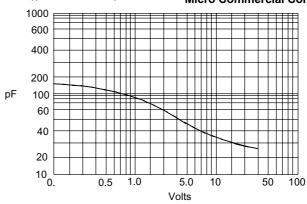


Figure 3
Typical Junction Capacitance

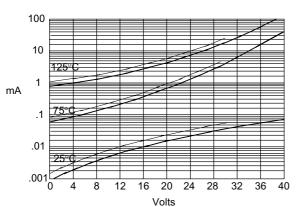
**Micro Commercial Components** 



Junction Capacitance - pFversus Reverse Voltage - Volts

Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



Typical Reverse Current - mAversus Reverse Voltage - Volts 

#### **Micro Commercial Components**

### Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 3Kpcs/Reel	

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.