



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

**SK102
THRU
SK1010**

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- For Surface Mount Applications
- High Current Capability With Low Forward Voltage
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Halogen free available upon request by adding suffix "-HF"

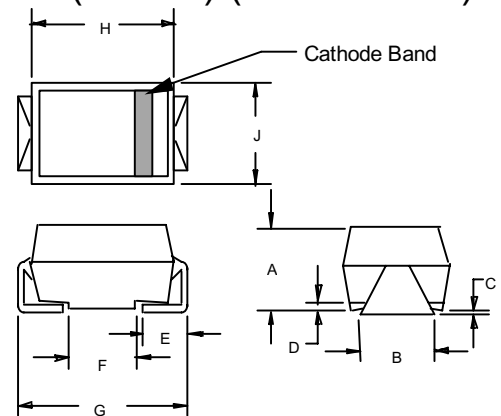
**10 Amp Schottky
Rectifier
20 to 100 Volts**

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 18°C/W Junction To Lead

| MST Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SK102 | SK102 | 20V | 14V | 20V |
| SK103 | SK103 | 30V | 21V | 30V |
| SK1035 | SK1035 | 35V | 24.5V | 35V |
| SK104 | SK104 | 40V | 28V | 40V |
| SK1045 | SK1045 | 45V | 31.5V | 45V |
| SK105 | SK105 | 50V | 35V | 50V |
| SK106 | SK106 | 60V | 42V | 60V |
| SK108 | SK108 | 80V | 56V | 80V |
| SK1010 | SK1010 | 100V | 70V | 100V |

**DO-214AB
(HSMC) (Round Lead)**

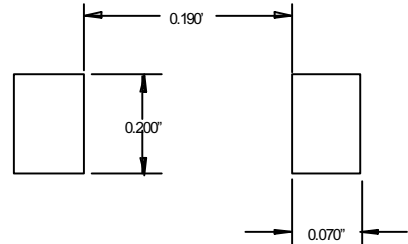


| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .200 | .214 | 5.08 | 5.43 | |
| B | .177 | .203 | 4.70 | 5.30 | |
| C | .002 | .005 | .05 | .13 | |
| D | — | .02 | — | .51 | |
| E | .047 | .056 | 1.20 | 1.42 | |
| F | .168 | .179 | 4.27 | 4.55 | |
| G | .309 | .322 | 7.85 | 8.18 | |
| H | .239 | .243 | 6.08 | 6.18 | |
| J | .234 | .240 | 5.95 | 6.10 | |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|--------------|---|
| Average Forward Current | $I_{F(AV)}$ | 10.0A | $T_L = 95^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 250A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | .65V .85V | $I_{FM} = 10.0A;$ $T_J = 25^\circ\text{C}^*$ |
| 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 | 500pF | Measured at 1.0MHz, $V_R=4.0V$ |

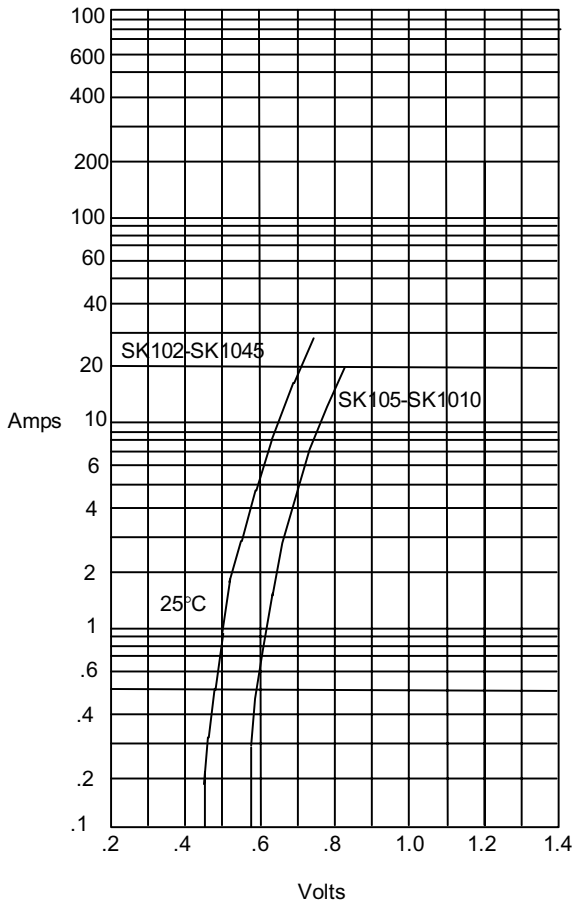
SUGGESTED SOLDER PAD LAYOUT



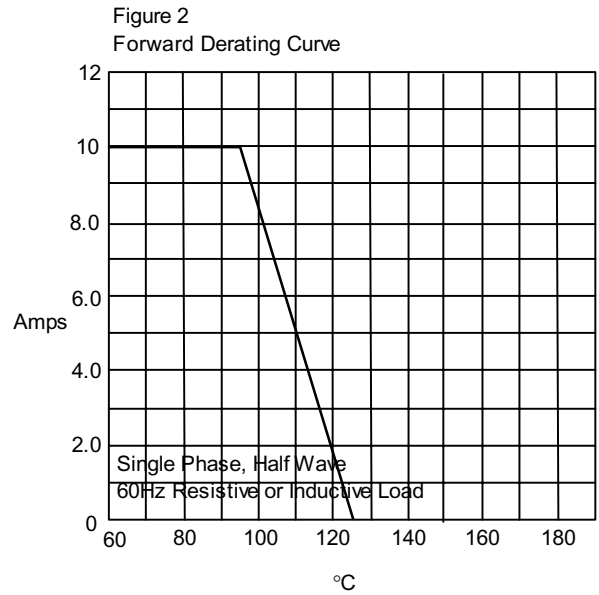
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

SK102 thru SK1010

Figure 1
Typical Forward Characteristics

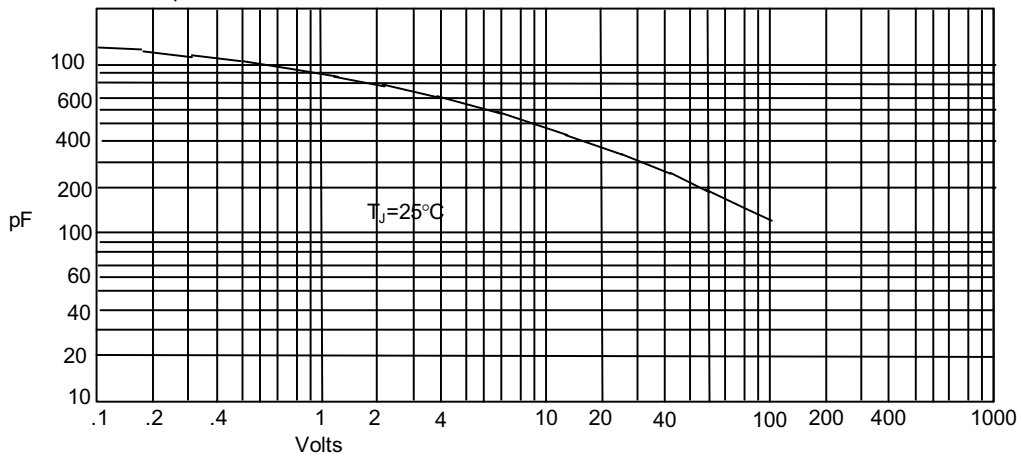


Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes
versus Lead Temperature - C

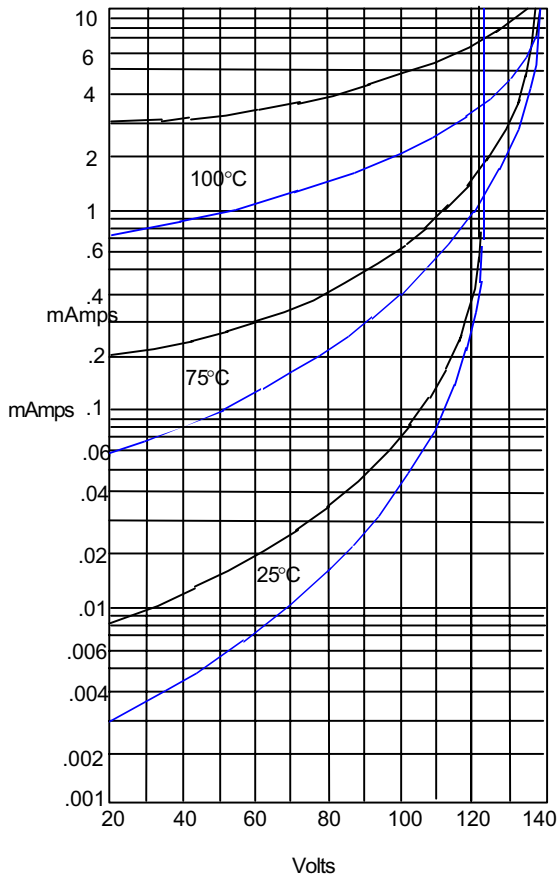
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

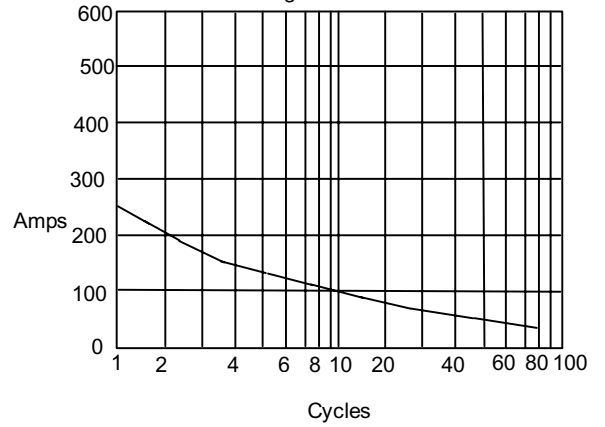
SK102 thru SK1010

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

| | |
|--------------|---|
| SK102-SK1045 | — |
| SK105-SK1010 | — |



Micro Commercial Components

Ordering Information :

| Device | Packing |
|----------------|-------------------------|
| Part Number-TP | Tape&Reel: 1.5Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [Micro Commercial Components \(MCC\)](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [D1FH3-5063](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [RB551V-30](#) [BAS16E6433HTMA1](#) [BAT](#)
[54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#) [SK310-T](#) [SK32A-LTP](#) [SK34B-TP](#)
[SS3003CH-TL-E](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [SB007-03C-TB-E](#) [SK32A-TP](#) [SK33B-TP](#)
[SK38B-TP](#) [NRVBM120LT1G](#) [NTE505](#) [NTSB30U100CT-1G](#) [SS15E-TP](#) [VS-6CWQ10FNHM3](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#)
[ACDBA140-HF](#) [ACDBA2100-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#)
[SK310B-TP](#) [MA4E2502L-1246](#) [MA4E2502H-1246](#) [NRVBM120ET1G](#) [NSR01L30MXT5G](#) [NTE573](#) [NTE6081](#) [SB560](#) [PMAD1108-LF](#)
[SD103ATW-TP](#)