



Micro Commercial Components Corp.

Complete Discrete Semiconductor Solutions

Product Catalog > [Diodes](#) > [Schottky Barrier Rectifiers](#) >

| | |
|----------------|-----------------------------|
| Part Number | SK12 |
| product family | SCHOTTKY BARRIER RECTIFIERS |
| package type | HSMB |
| VRM(PRV) | 20V |
| Ifsm | 30A |
| IF(AV) | 1.0A |
| @Vf | 0.45V |
| @If | 1.0A |
| Trr | |
| IR | 0.5mA |
| @VR | 20V |
| Package Qty | Tape : 3K/Reel, 48K/Ctn; |

This product is listed under the following categories where you may find similar products:
[Diodes](#)
[Schottky Barrier Rectifiers](#)



Micro Commercial Components

SK12 THRU SK110

1 Amp Schottky Rectifier 20 to 100 Volts

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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

Maximum Ratings

- Operating Temperature(T_j): -55°C to +125°C
- Storage Temperature(T_{stg}): -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC 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 |

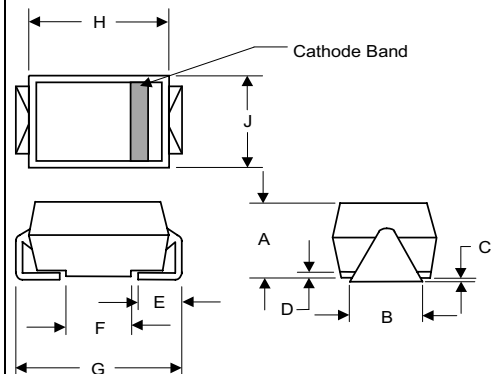
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|---|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0A | $T_j = 90^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | SK12 SK13 SK14 SK15-16 SK18-110 | $I_{FM} = 1.0\text{A};$ $T_a = 25^\circ\text{C}^*$ |
| | | .45V | |
| | | .55V | |
| | | .60V | |
| | | .72V .85V | |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 0.5mA 20mA | $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$ |
| Typical Junction Capacitance | C_j | SK12 SK13-SK110 | Measured at 1.0MHz, $V_R=4.0\text{V}$ |
| | | 110pF 30pF | |

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

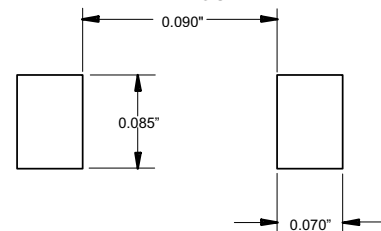
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-214AA (HSMB) (Round Lead)



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | 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





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.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.