



Micro Commercial Components



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

SK32 THRU SK310

3 Amp Schottky Rectifier 20 to 100 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- High Current Capability With Low Forward Voltage
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance :20°C/W Junction To Case
- Maximum Thermal Resistance :10°C/W Junction To Lead
- Maximum Thermal Resistance :55°C/W Junction To Ambient

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SK32 | SK32 | 20V | 14V | 20V |
| SK33 | SK33 | 30V | 21V | 30V |
| SK34 | SK34 | 40V | 28V | 40V |
| SK35 | SK35 | 50V | 35V | 50V |
| SK36 | SK36 | 60V | 42V | 60V |
| SK38 | SK38 | 80V | 56V | 80V |
| SK310 | SK310 | 100V | 70V | 100V |

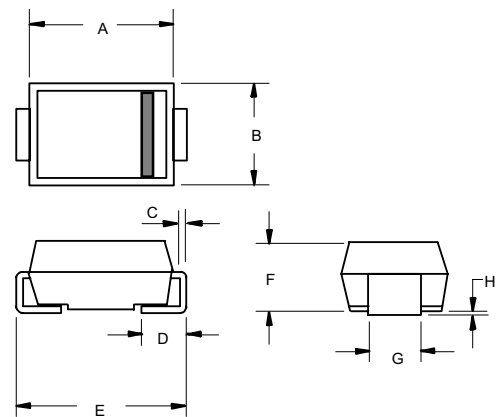
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|----------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 3.0A | $T_L = 100^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 100A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage SK32-34 SK35-36 SK38-310 | V_F | .50V .75V .85V | $I_{FM} = 3.0A$; $T_J = 25^\circ\text{C}^*$ |
| 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 | 250pF | Measured at 1.0MHz, $V_R=4.0V$ |

*Pulse test: Pulse width 200 μsec , Duty cycle 2%

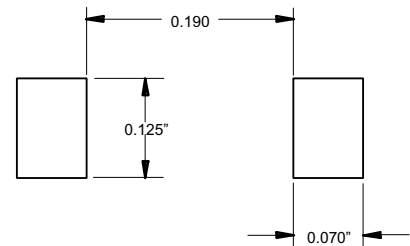
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-214AB (SMC) (LEAD FRAME)



| DIMENSIONS | | | | | |
|------------|--------|------|-------|-------|------|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | |
| A | .260 | .280 | 6.60 | 7.11 | |
| B | .220 | .245 | 5.59 | 6.22 | |
| C | .006 | .012 | 0.15 | 0.31 | |
| D | .030 | .060 | 0.76 | 1.52 | |
| E | .305 | .320 | 7.75 | 8.13 | |
| F | .079 | .103 | 2.00 | 2.62 | |
| G | .108 | .128 | 2.75 | 3.25 | |
| H | .002 | .008 | 0.050 | 0.203 | |

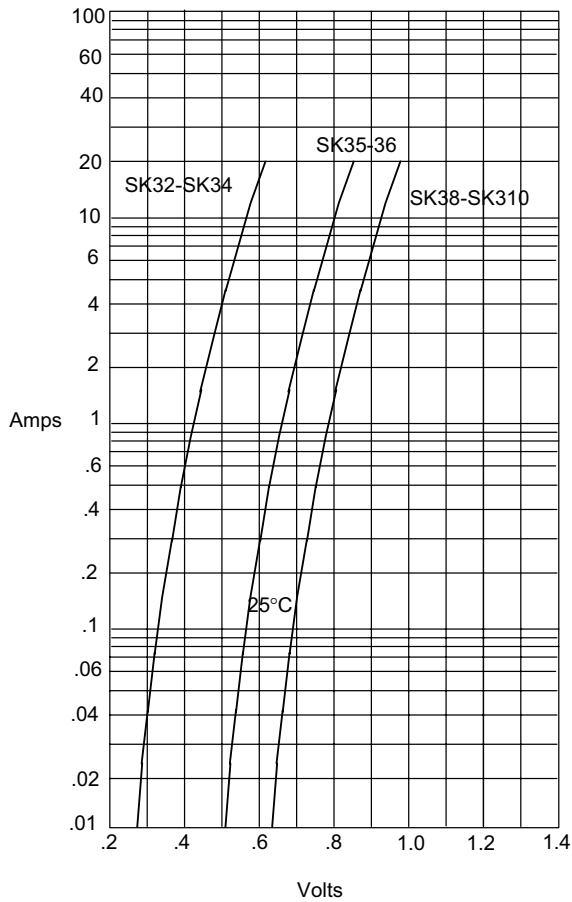
SUGGESTED SOLDER PAD LAYOUT



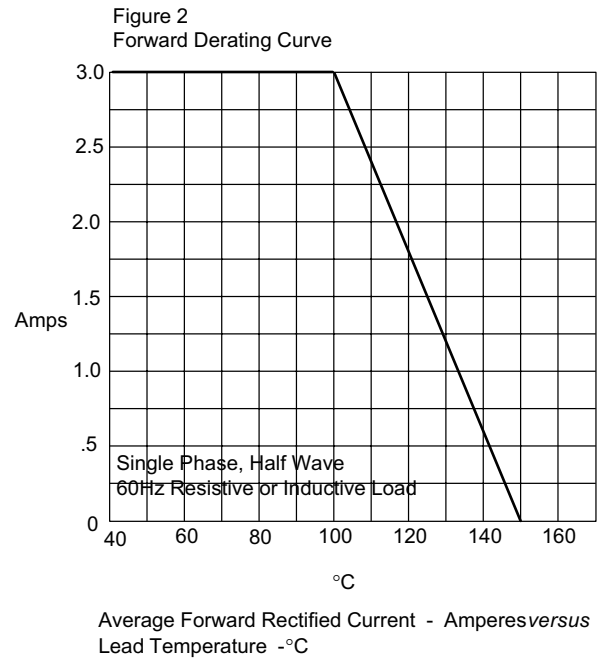
www.mccsemi.com

SK32 thru SK310

Figure 1
Typical Forward Characteristics

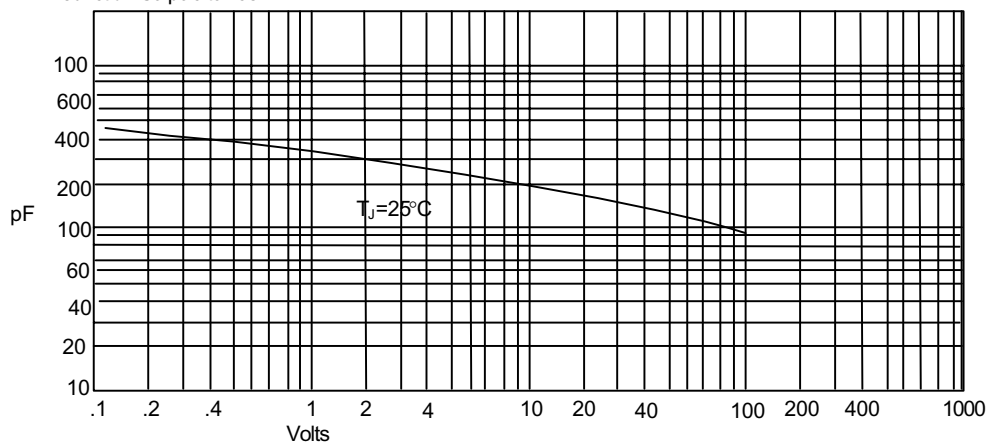


Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts



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

Figure 3
Junction Capacitance



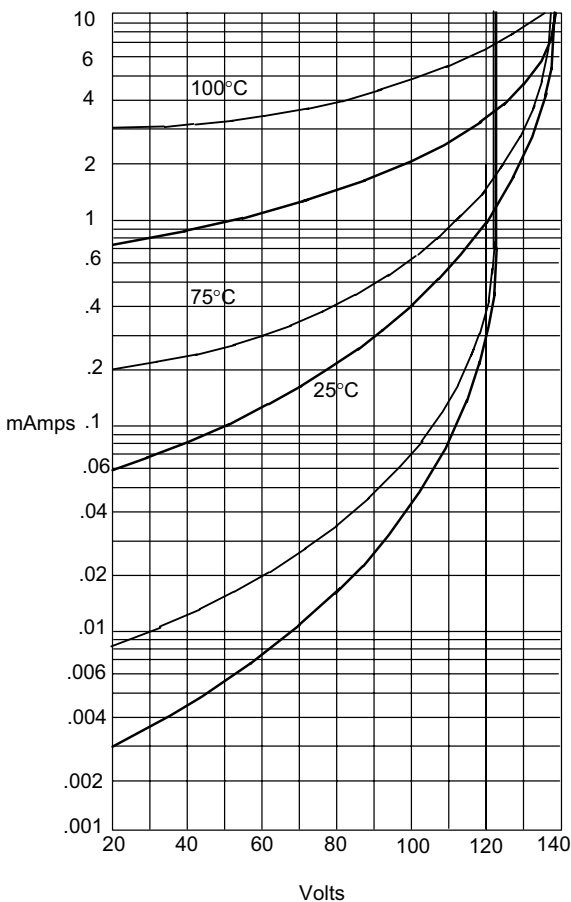
Junction Capacitance - pF versus
Reverse Voltage - Volts

SK32 thru SK310



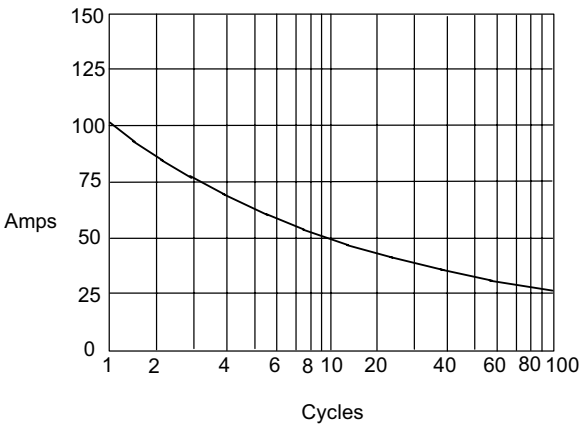
Micro Commercial Components

Figure 4
Typical Reverse Characteristics



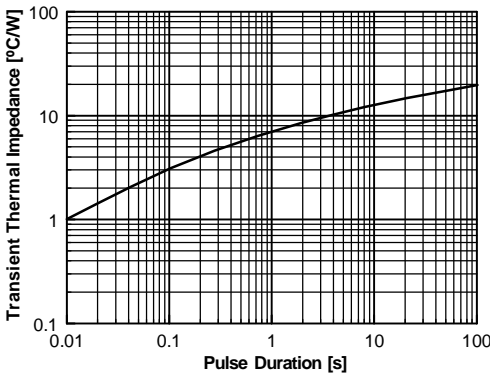
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



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

Figure 6
Thermal Impedance Characteristics



Ordering Information :

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Micro Commercial Components \(MCC\):](#)

[SK38-T](#) [SK35-T](#) [SK32-T](#) [SK34-T](#) [SK36-T](#) [SK33-T](#)