



Micro Commercial Components

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SK12 THRU SK110

1 Amp Schottky Rectifier 20 to 100 Volts

Features

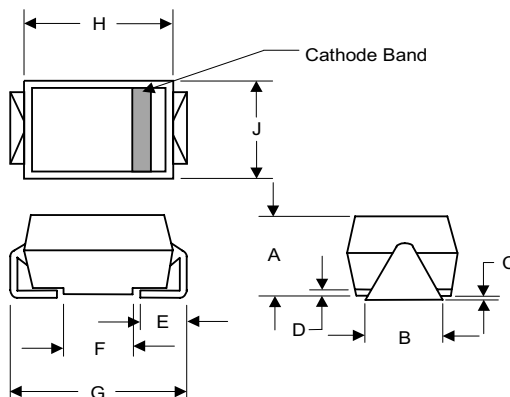
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Forward Voltage
- Guard Ring Protection
- High Current Capability
- Low Thermal Resistance
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

Maximum Ratings

- Operating Temperature(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 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 |

DO-214AA (HSMB) (Round Lead)



Electrical Characteristics @ 25°C Unless Otherwise Specified

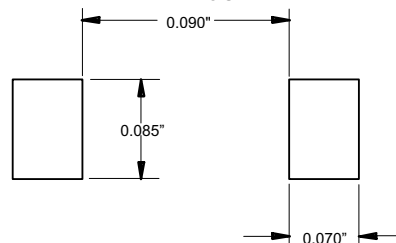
| | | | |
|---|-------------|--|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0A | $T_J = 90^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | SK12 .45V SK13 .55V SK14 .60V SK15-16 .72V SK18-110 .85V | $I_{FM} = 1.0A;$ $T_a = 25^\circ\text{C}^*$ |
| 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 110pF SK13-SK110 30pF | Measured at 1.0MHz, $V_R=4.0V$ |

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

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

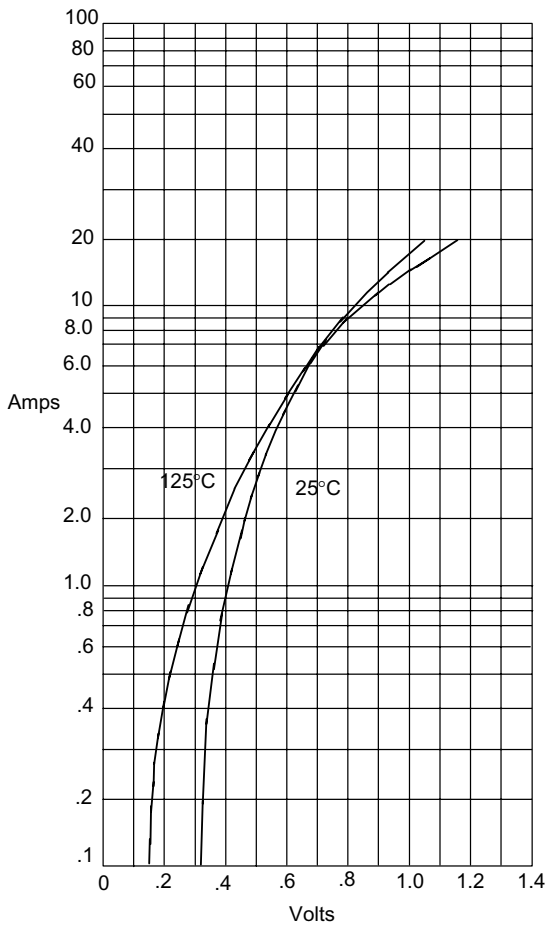
| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|------|------|
| | INCHES | | MM | | |
| A | .078 | .116 | 1.98 | 2.95 | |
| B | .075 | .089 | 1.90 | 2.25 | |
| C | .002 | .008 | .05 | .20 | |
| D | --- | .02 | --- | .51 | |
| E | .035 | .055 | .90 | 1.40 | |
| F | .065 | .091 | 1.65 | 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



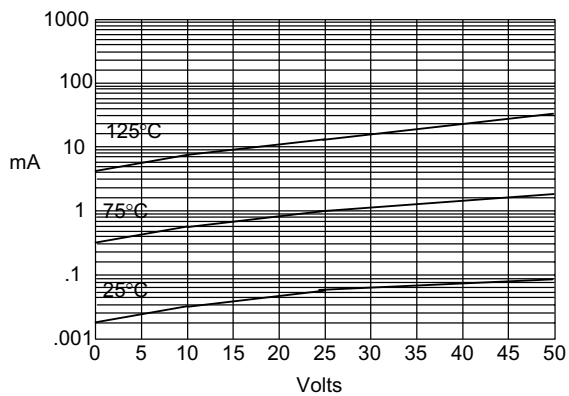
SK12

Figure 1
Typical Forward Characteristics



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

Figure 2
Typical Reverse Characteristics



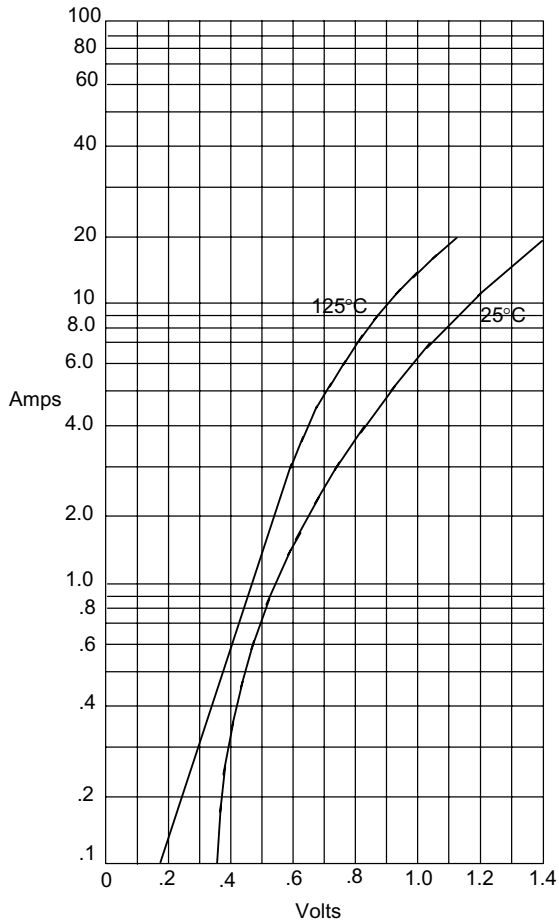
Typical Reverse Current - mA *versus*
Reverse Voltage - Volts

SK13 thru SK110



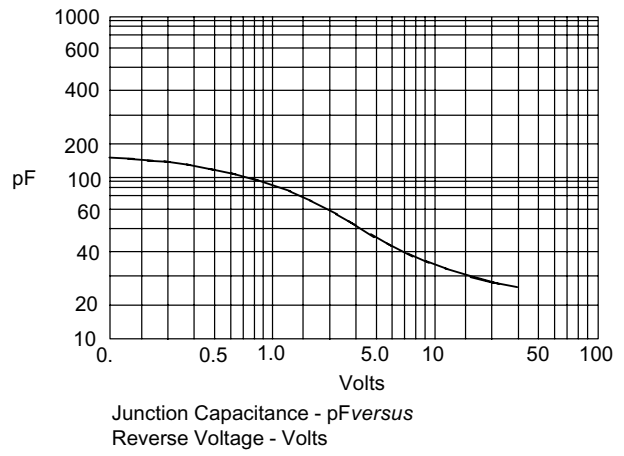
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Figure 1
Typical Forward Characteristics



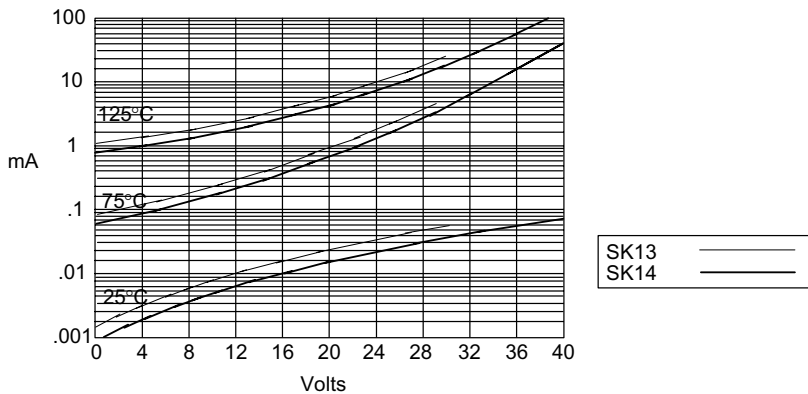
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 3
Typical Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

Figure 2
Typical Reverse Characteristics



Typical Reverse Current - mA versus
Reverse Voltage - Volts



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Ordering Information

| | |
|------------------|----------------------|
| Device | Packing |
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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