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



Micro Commercial Components



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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 | Device | Maximum | Maximum | Maximum |
|---------|---------|--------------|---------|----------|
| Catalog | Marking | Recurrent | RMS | DC |
| Number | - | Peak Reverse | Voltage | Blocking |
| | | Voltage | 0 | 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 _{F(AV)} | 1.0A | T _J = 90°C | | |
|---|--------------------|-------|------------------------------|--|--|
| Current | | | | | |
| Peak Forward Surge | IFSM | 30A | 8.3ms, half sine | | |
| Current | | | | | |
| Maximum | | | | | |
| Instantaneous | | | | | |
| Forward Voltage | | | | | |
| SK12 | VF | .45V | I _{FM} = 1.0A; | | |
| SK13 | | .55V | T _a = 25°C* | | |
| SK14 | | .60V | | | |
| SK15-16 | | .72V | | | |
| SK18-110 | | .85V | | | |
| Maximum DC Reverse | 1- | 0.5mA | T _A = 25°C | | |
| Current At Rated DC | I _R | | 2 Y | | |
| Blocking Voltage | | 20mA | T _A = 100°C | | |
| Typical Junction | | | | | |
| Capacitance | | | | | |
| SK12 | CJ | 110pF | Measured at | | |
| SK13-SK110 | | 30pF | 1.0MHz, V _R =4.0V | | |
| Pulse test: Pulse width 300 usec. Duty cycle 2% | | | | | |

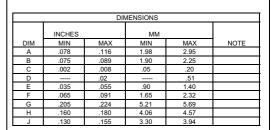


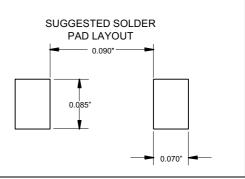
SK12

THRU

SK110

DO-214AA (HSMB) (Round Lead) Cathode Band Е





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

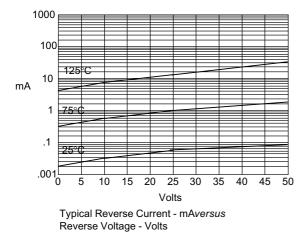
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

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SK12

Figure 1 Typical Forward Characteristics 100 80 60 40 20 10 8.0 6.0 Amps 4.0 125°C 25°C 2.0 1.0 .8 .6 .4 .2 .1 .8 .2 1.0 1.2 1.4 0 .4 .6 Volts

Figure 2 Typical Reverse Characteristics



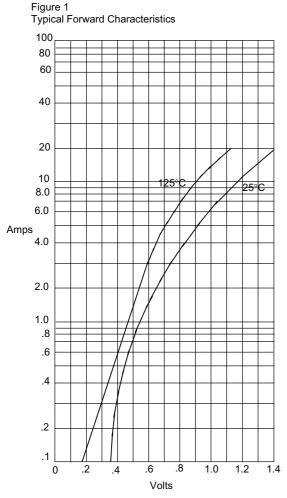
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Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

SK13 thru SK110



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 2 Typical Reverse Characteristics

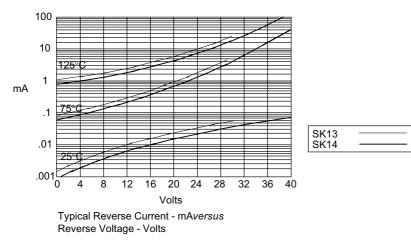


Figure 3 Typical Junction Capacitance **Micro Commercial Components** 1000 600 400 200 pF 100 60 Т 40 20 10 ^L 0. 0.5 1.0 5.0 10 50 100 Volts Junction Capacitance - pFversus

 $\cdot M \cdot C \cdot C \cdot$

Junction Capacitance - pF vers Reverse Voltage - Volts

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Ordering Information :

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

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