



Micro Commercial Components



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SK12-L THRU SK110-L

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Reverse Energy Tested and Guard Ring Protection
- High Current Capability and Low Forward Voltage
- Extremely Low Thermal Resistance
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SK12-L | SK12 | 20V | 14V | 20V |
| SK13-L | SK13 | 30V | 21V | 30V |
| SK14-L | SK14 | 40V | 28V | 40V |
| SK15-L | SK15 | 50V | 35V | 50V |
| SK16-L | SK16 | 60V | 42V | 60V |
| SK18-L | SK18 | 80V | 56V | 80V |
| SK110-L | SK110 | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

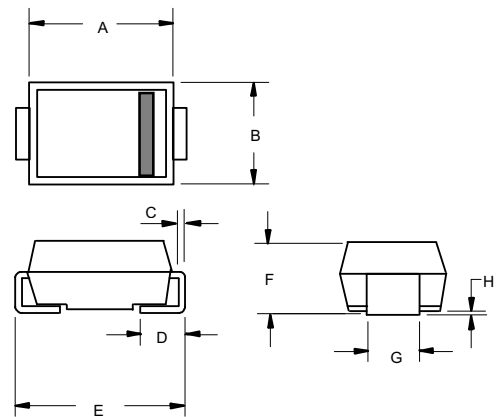
| | | | |
|---|-------------|--|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0A | $T_L = 75^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | SK12~14 SK15~16 SK18~110 .50V .72V .85V | $I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}$ |
| 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 | SK12 SK13~110 110pF 30pF | Measured at 1.0MHz, $V_R=4.0V$ |

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

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

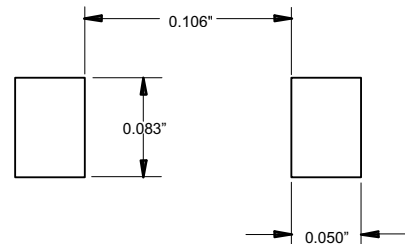
1 Amp Schottky Rectifier 20 to 100 Volts

DO-214AA (SMB) (LEAD FRAME)



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .160 | .185 | 4.06 | 4.70 | |
| B | .130 | .155 | 3.30 | 3.94 | |
| C | .006 | .012 | 0.15 | 0.31 | |
| D | .030 | .060 | 0.76 | 1.52 | |
| E | .200 | .220 | 5.08 | 5.59 | |
| F | .079 | .096 | 2.00 | 2.44 | |
| G | .075 | .087 | 1.91 | 2.21 | |
| H | .002 | .008 | 0.05 | 0.203 | |

SUGGESTED SOLDER PAD LAYOUT



SK12-L thru SK110-L

Rating and Characteristic Curves

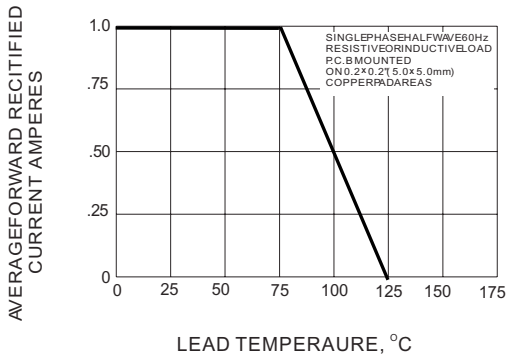


Figure 1. -- Forward current derating curve

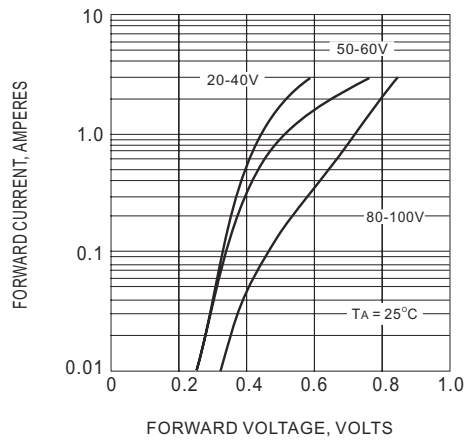


Figure 2. -- Typical Instantaneous Forward Characteristic

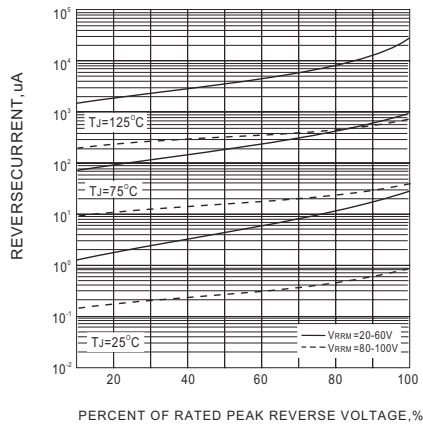


Figure 3. -- Typical Reverse Characteristics

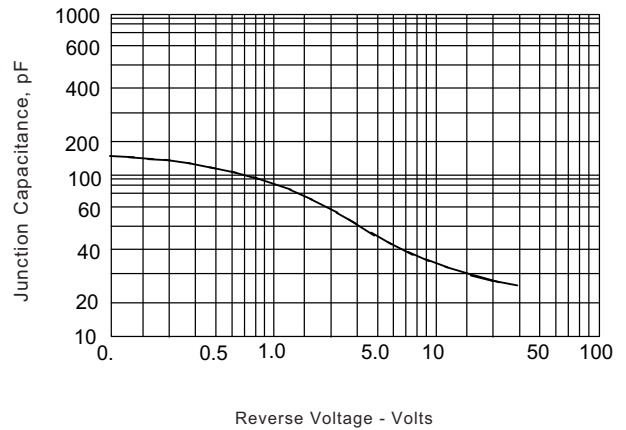


Figure 4. -- Typical Junction Capacitance



TM

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Ordering Information :

| Device | Packing |
|--------------------|-----------------------|
| SK12-LTP~SK110-LTP | Tape&Reel: 3Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. SK12-LTP-HF~SK110-LTP-HF

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