Micro Commercial Components
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# SK22-L THRU SK220-L

## 2 Amp Schottky Rectifier 20 to 200 Volts

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Guard Ring Protection
- High Current Capability
- Extremely Low Thermal Resistance

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance:RthjL-15 °C/W;Rthja-71 °C/W

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---|---|---|---|---|
| SK22-L | SK22 | 20V | 14V | 20V |
| SK23-L | SK23 | 30V | 21V | 30V |
| SK24-L | SK24 | 40V | 28V | 40V |
| SK25-L | SK25 | 50V | 35V | 50V |
| SK26-L | SK26 | 60V | 42V | 60V |
| SK28-L | SK28 | 80V | 56V | 80V |
| SK210-L | SK210 | 100V | 70V | 100V |
| SK2150-L | SK2150 | 150V | 105V | 150V |
| SK220-L | SK220 | 200V | 140V | 200V |

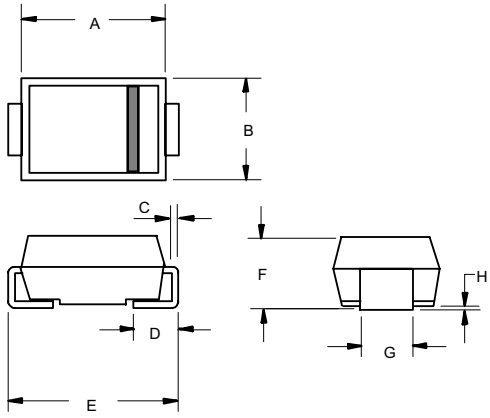
## Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|---|---|---|
| Average Forward Current | $I_{F(AV)}$ | 2.0A | $T_L$ = 105°C |
| Peak Forward Surge Current | $I_{FSM}$ | 50A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage<br>SK22-SK24<br>SK25-SK26<br>SK28-SK210<br>SK2150-SK220 | $V_F$ | <br>.50V<br>.70V<br>.85V<br>.90V | $I_{FM}$ = 2.0A;<br>$T_J$ = 25°C* |
| Maximum DC Reverse Current At Rated DC Blocking Voltage<br>SK22-SK24<br>SK25-SK210<br>SK2150-SK220 | $I_R$ | <br>2.0 mA<br>1.0 mA<br>0.5 mA | $T_J$ = 25°C |
| Typical Junction Capacitance<br>SK22<br>SK23-SK210<br>SK2150-SK220 | $C_J$ | <br>230pF<br>50pF<br>170 pF | <br>Measured at<br>1.0MHz, $V_R$=4.0V |

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

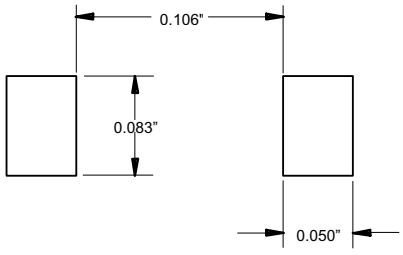
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-214AA
(SMB) (LEAD FRAME)




| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| 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



# SK22-L thru SK210-L
## Rating and Characteristic Curves

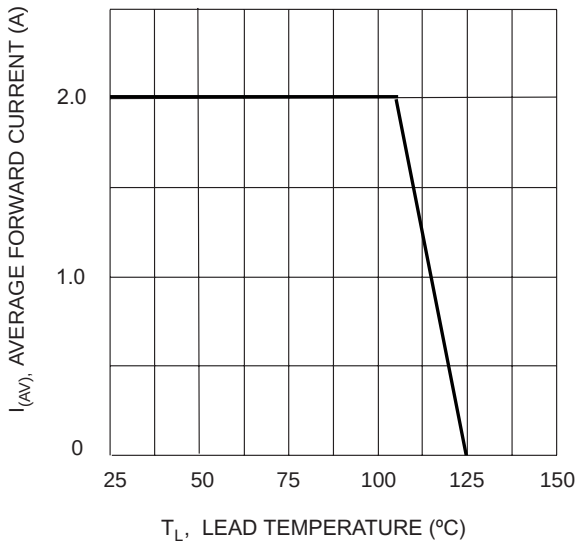



Fig. 1 Forward Current Derating Curve

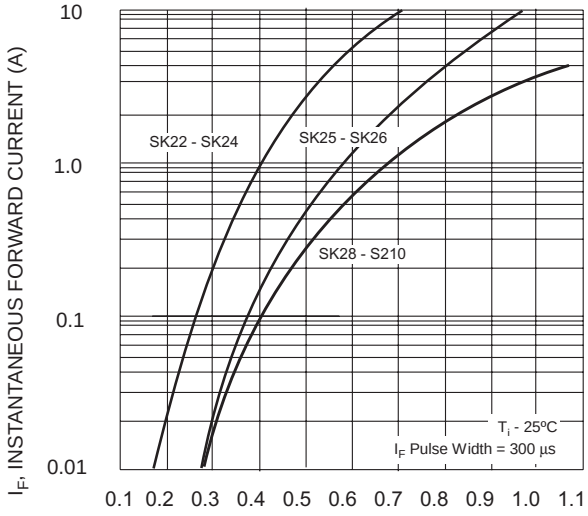



Fig. 2 Typ. Forward Characteristics

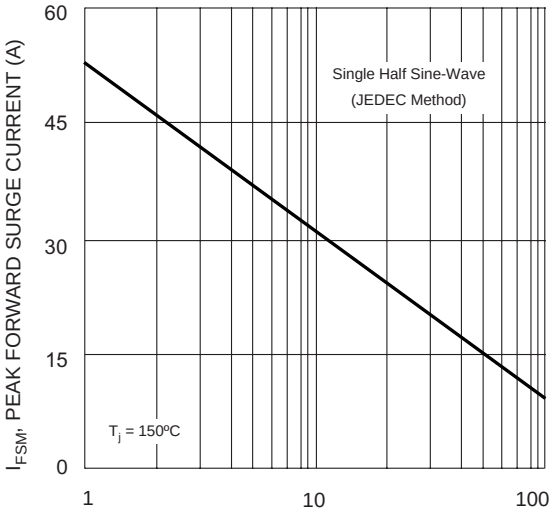



Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

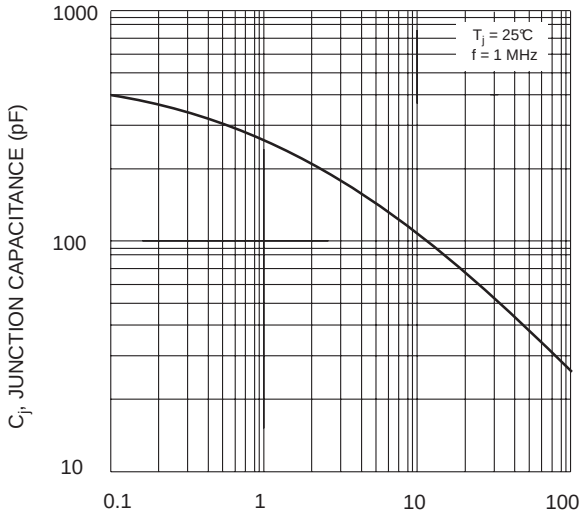



Fig. 4 Typical Junction Capacitance

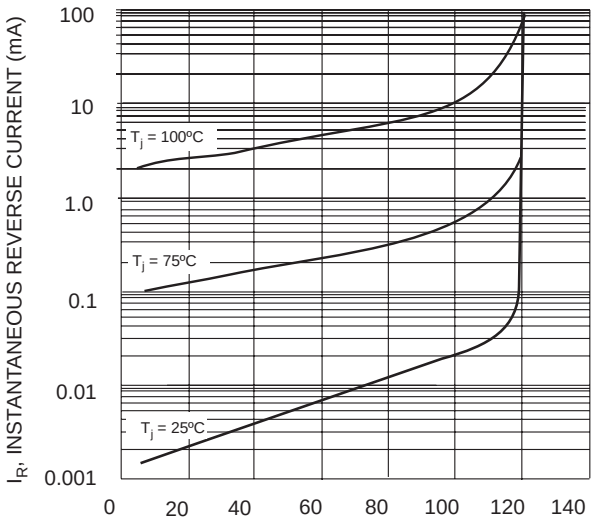



Fig. 5 Typical Reverse Characteristics

# SK2150-L thru SK220-L
## Rating and Characteristic Curves

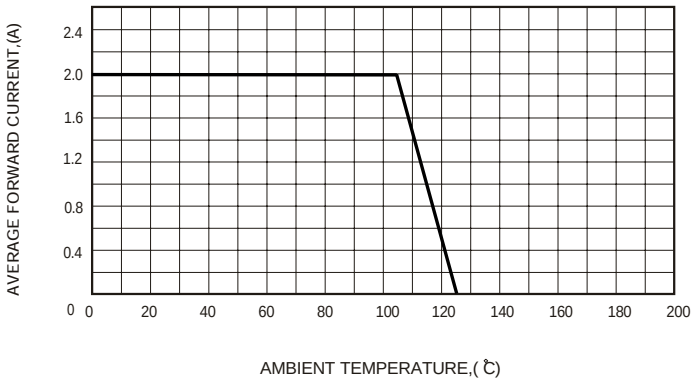



FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

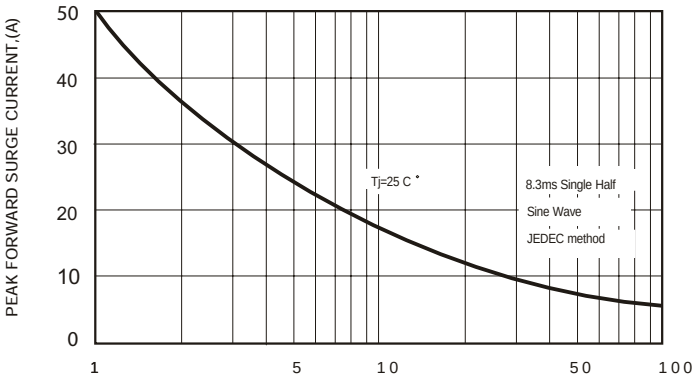



FIG.4-TYPICAL JUNCTION CAPACITANCE

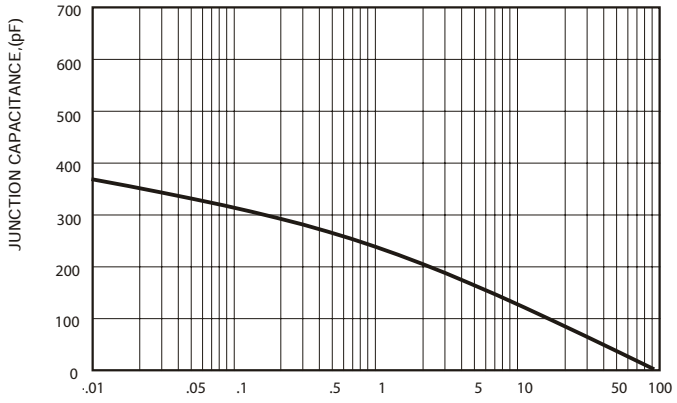



FIG.2-TYPICAL FORWARD CHARACTERISTICS

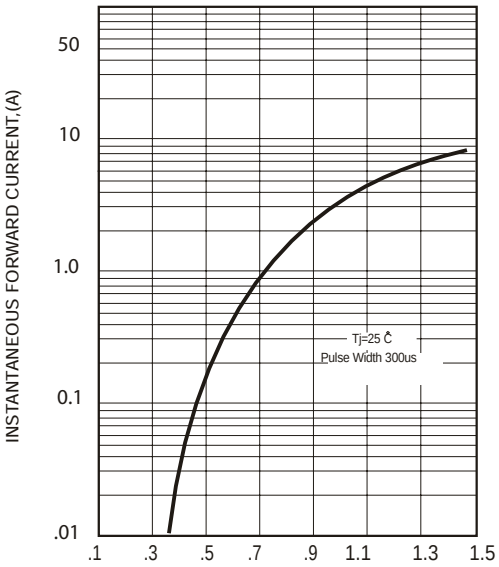
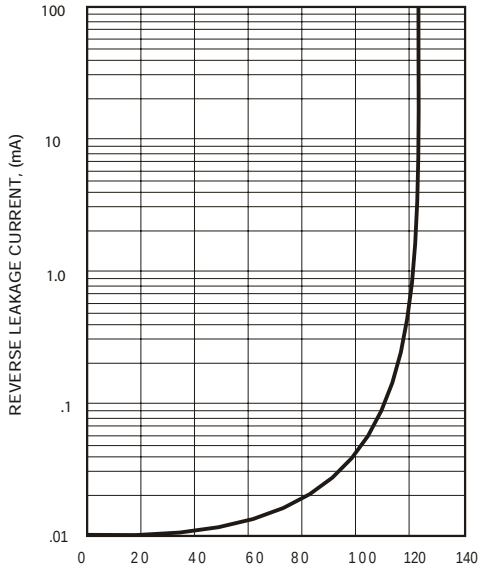



FIG.5 - TYPICAL REVERSE CHARACTERISTICS



## Ordering Information :

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

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|---|
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