

SK110 SCHOTTKY RECTIFIER

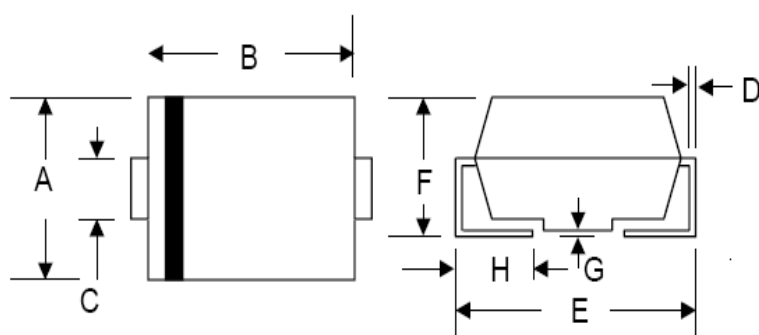
Applications:

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Disk drives
- Battery charging

Features:

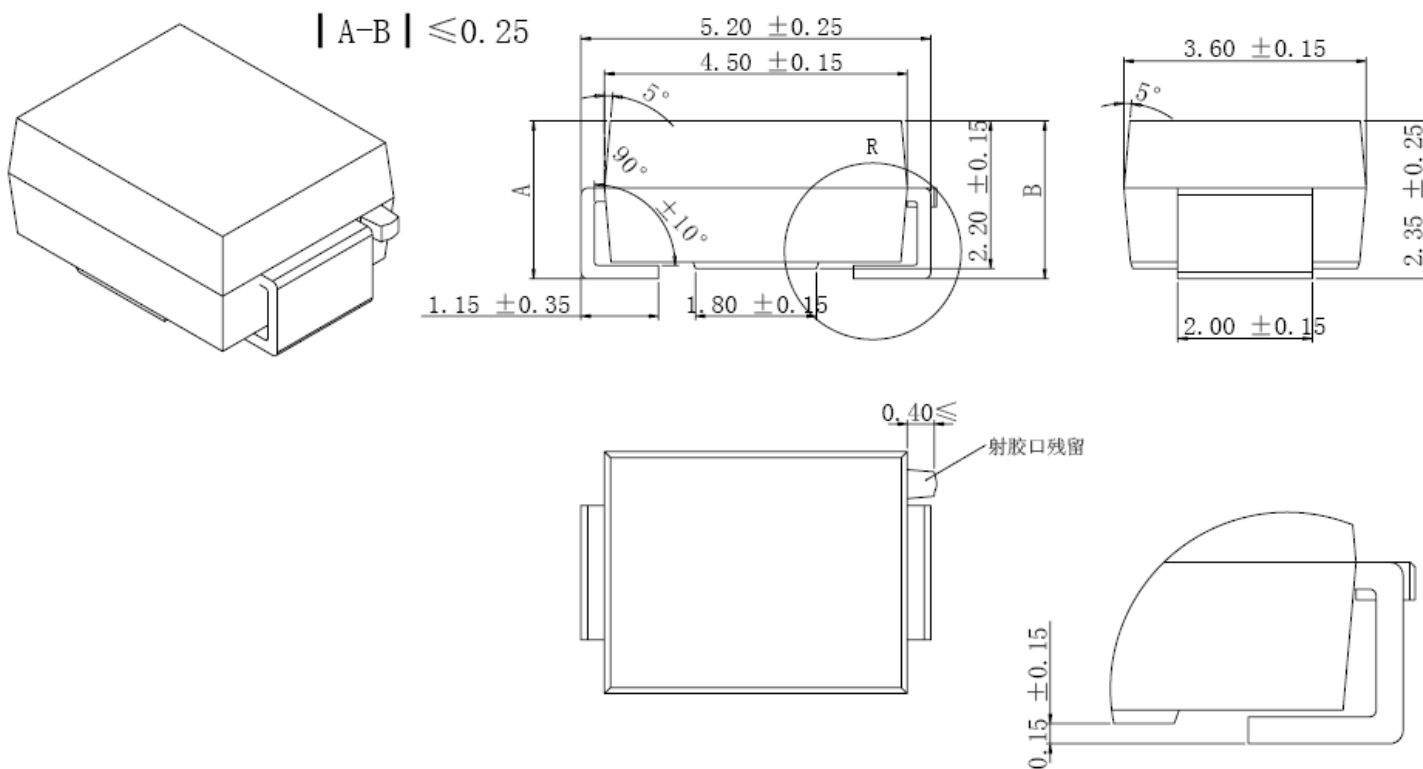
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions: In mm



| SMB/DO-214AA | | | | |
|--------------|-------|-------|---------|-------|
| Dim | Min | Max | Min | Max |
| A | 3.30 | 3.94 | 0.130 | 0.155 |
| B | 4.06 | 4.70 | 0.160 | 0.185 |
| C | 1.91 | 2.11 | 0.075 | 0.083 |
| D | 0.152 | 0.305 | 0.006 | 0.012 |
| E | 5.08 | 5.59 | 0.2 | 0.220 |
| F | 2.13 | 2.44 | 0.084 | 0.096 |
| G | 0.051 | 0.203 | 0.002 | 0.008 |
| H | 0.76 | 1.27 | 0.029 | 0.05 |
| | in mm | | In inch | |

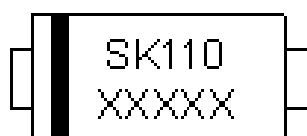
OPTION 1



OPTION 2(JK)

SMB

Marking Diagram:



Where XXXXX is YYWWL

| | |
|----|--------------------------|
| SK | = Package type |
| 1 | = Forward Current (1A) |
| 10 | = Reverse Voltage (100V) |
| YY | = Year |
| WW | = Week |
| L | = Lot Number |

Cautions: Molding resin
 Epoxy resin UL:94V-0

Ordering Information:

| Device | Package | Shipping |
|--------|------------------|----------------|
| SK110 | SMB (Pb-Free) | 3000pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | SK110 | Units |
|---|-----------------|---|--------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} | 100 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 71 | |
| Average Forward Current @ $T_L = 120^\circ\text{C}$ | $I_{F(AV)}$ | 1.0 | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | A |
| Forward Voltage @ $I_F = 1.0\text{A}$ | V_F | 0.85 | V |
| Maximum DC reverse current at rated DC blocking voltage | I_R | 0.5 20 | mA |
| | | @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$ | |
| Thermal Resistance Junction to Lead ($T_L = 25^\circ\text{C}$) | $R_{\theta JL}$ | 22 | $^\circ\text{C/W}$ |
| Typical Thermal Resistance Junction to Ambient (Note1) | $R_{\theta JA}$ | 95 | $^\circ\text{C/W}$ |
| Operating temperature range | T_J | -55 to +150 | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 to +150 | $^\circ\text{C}$ |
| Voltage Rate of Change | dv/dt | 10000 | V/ μs |

Note: 1. Mounted on P.C. Board with 5.0mm^2 copper pad areas

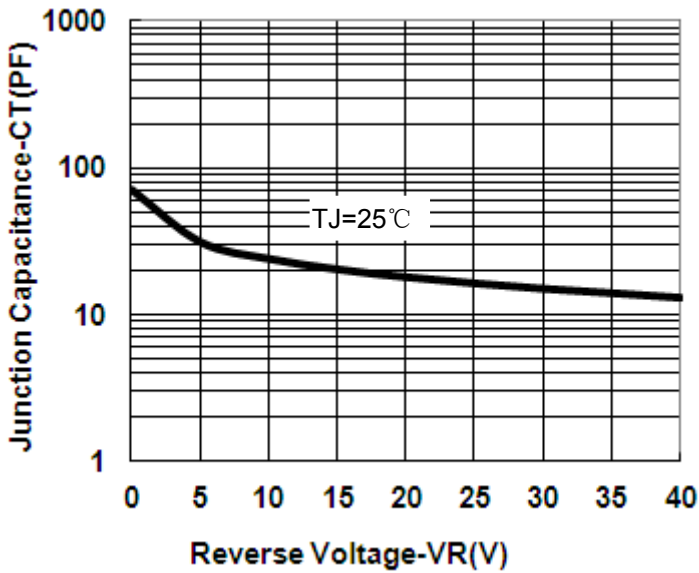


Fig.1-Typical Junction Capacitance Vs. Reverse Voltage

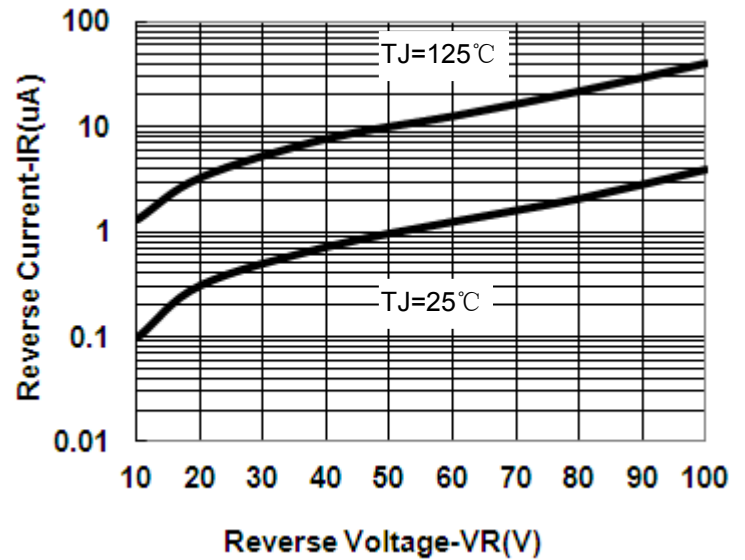


Fig.2-Typical Values Of Reverse Current Vs. Reverse Voltage

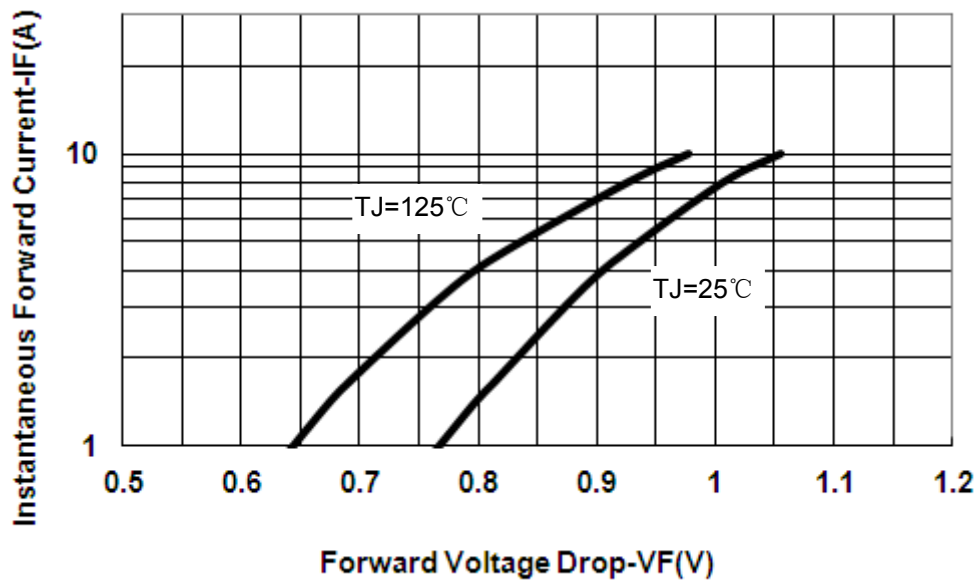


Fig.3-Typical Forward Voltage Drop Characteristics

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