

## Major Ratings and Characteristics

|                    |                       |
|--------------------|-----------------------|
| $I_{F(AV)}$        | 2.0 A                 |
| $V_{RRM}$          | 20 V to 100 V         |
| $I_{FSM}$          | 50 A                  |
| $V_F$              | 0.55 V, 0.70 V, 0.85V |
| $T_j \text{ max.}$ | 150 °C                |

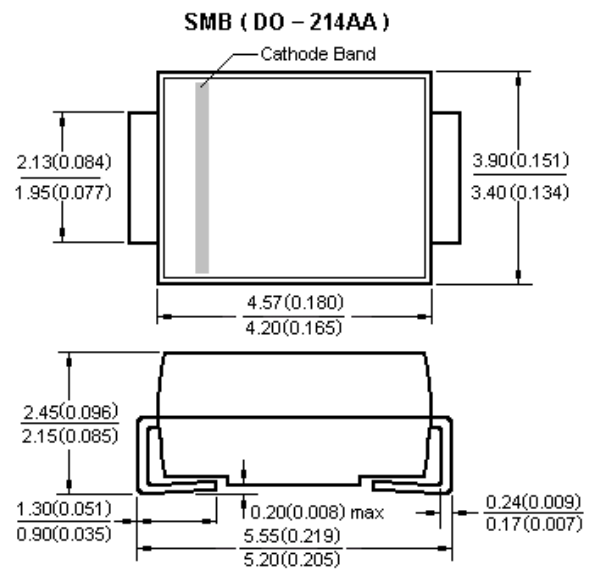


## Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

## Mechanical Date

- Case: JEDEC DO-214AA molded plastic body over passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



## Maximum Ratings & Thermal Characteristics & Electrical Characteristics

( $T_A = 25\text{ °C}$  unless otherwise noted)

|   | Symbol          | SK22 (SS22)  | SK23 (SS23) | SK24 (SS24) | SK25 (SS25) | SK26 (SS26) | SK28 (SS28) | SK210 (SS210) | UNIT       |
|---|-----------------|--------------|-------------|-------------|-------------|-------------|-------------|---------------|------------|
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 20           | 30          | 40          | 50          | 60          | 80          | 100           | V          |
| Maximum RMS voltage   | $V_{RMS}$       | 14           | 21          | 28          | 35          | 42          | 56          | 70            | V          |
| Maximum DC blocking voltage   | $V_{DC}$        | 20           | 30          | 40          | 50          | 60          | 80          | 100           | V          |
| Maximum average forward rectified current   | $I_{F(AV)}$     | 2            |             |             |             |             |             |               | A          |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load                          | $I_{FSM}$       | 50           |             |             |             |             |             |               | A          |
| Maximum instantaneous forward voltage at 2.0A   | $V_F$           | 0.55         |             | 0.70        |             | 0.85        |             | V             |            |
| Maximum DC reverse current<br>$T_A = 25\text{ °C}$<br>at Rated DC blocking voltage<br>$T_A = 100\text{ °C}$ | $I_R$           | 0.5          |             |             |             |             |             |               | mA         |
|   |                 | 5            |             |             |             |             |             |               | mA         |
| Voltage rate of change (rated VR)   | dv/dt           | 10000        |             |             |             |             |             |               | V/ $\mu$ s |
| Thermal resistance from junction to ambient   | $R_{\theta JA}$ | 88           |             |             |             |             |             |               | °C/W       |
| Operating junction and storage temperature range  | $T_J, T_{STG}$  | - 65 to +150 |             |             |             |             |             |               | °C         |

# SK22~SK210(SS22~SS210) SMB

Schottky rectifier



Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

Fig.1 Forward Current Derating Curve

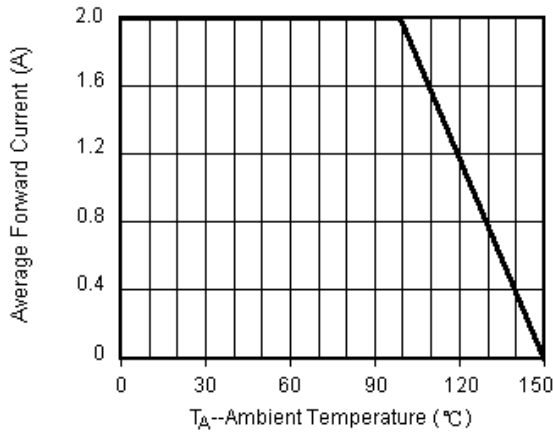


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

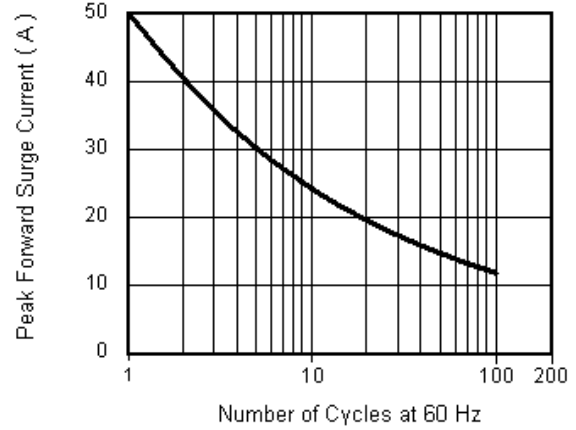


Fig.3 Typical Instantaneous Forward Characteristics

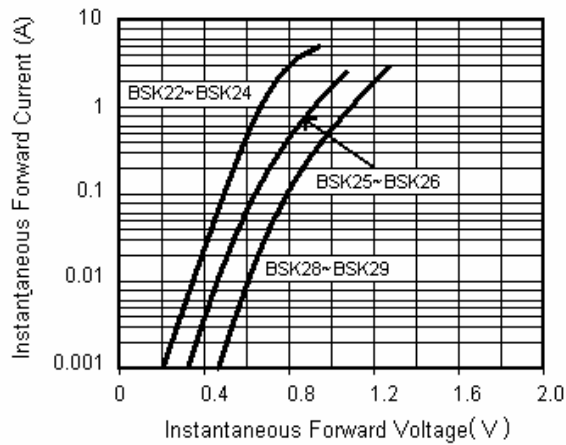


Fig.4 Typical Reverse Leakage Characteristics

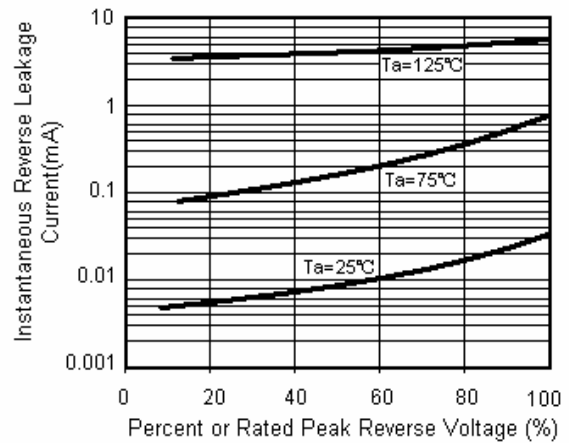


Fig.5 Typical Junction Capacitance

