



Schottky rectifier

## **Major Ratings and Characteristics**

| I <sub>F(AV)</sub>  | 2.0 A                  |
|---------------------|------------------------|
| $V_{RRM}$           | 20 V to 100 V          |
| I <sub>FSM</sub>    | 50 A                   |
| V <sub>F</sub>      | 0.55 V , 0.70 V, 0.85V |
| T <sub>j</sub> max. | 150 °C                 |

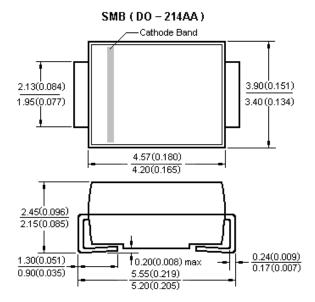


#### **Features**

- Low profile package
- · Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperatrue 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-214AAmolded plastic body over passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



Dimentsions in millimeters and (inchs)

#### **Maximum Ratings & Thermal Characteristics & Electrical Characteristics**

(TA = 25 °C unless otherwise noted)

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|--|-----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------|--|--|
|  | Symbol                            | SK22<br>(SS22) | SK23<br>(SS23) | SK24<br>(SS24) | SK25<br>(SS25) | SK26<br>(SS26) | SK28<br>(SS28) | SK210<br>(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 <sub>F(AV)</sub>                | 2              |                |                |                |                |                |                  |      |  |  |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>                  | 50             |                |                |                |                |                |                  | Α    |  |  |
| Maximum instantaneous forwad voltage at 2.0A                                       | V <sub>F</sub>                    | 0.55 0.70 0.85 |                |                |                |                | .85            | V                |      |  |  |
| Maximum DC reverse current $T_A = 25 \degree C$                                    |                                   | 0.5            |                |                |                |                |                |                  | mA   |  |  |
| at Rated DC blocking voltage $T_A = 100^{\circ}C$                                  | I <sub>R</sub>                    | 5              |                |                |                |                |                |                  |      |  |  |
| Voltage rate of change (rated VR)  | dv/dt                             | 10000          |                |                |                |                | V/µs           |                  |      |  |  |
| Thermal resistance from junction to ambient  | R <sub>0 JA</sub>                 | 88             |                |                |                |                |                | °C/W             |      |  |  |
| Operating junction and storage temperature range                                   | T <sub>J</sub> , T <sub>STG</sub> | - 65 to +150   |                |                |                |                |                |                  | °C   |  |  |

# SK22~SK210(SS22~SS210) SMB

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## Characteristic Curves (T<sub>A</sub>=25 ℃ unless otherwise noted)

Fig.1 Forward Current Derating Curve

2.0

1.6

1.2

0.8

0.4

0

30

60

90

120

150

T<sub>A</sub>--Ambient Temperature (\*C)

Fig.2 Maximum Non-Repetitive Peak
Forward Surge Current

40

40

30

10

10

100

200

Number of Cycles at 60 Hz

Fig.3 Typical Instantaneous Forward Characteristics

10
BSK22~BSK24
0.01
BSK25~BSK26
0.001
0 0.4 0.8 1.2 1.6 2.0
Instantaneous Forward Voltage(V)

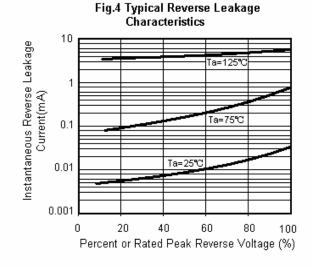


Fig.5 Typical Junction Capacitance

