



# Trench MOS Barrier Schottky Rectifier - 3Amp 100Volt

#### Features

- -Low forward voltage drop
- -High current capability
- -High reliability
- -High surge current capability
- -Epitaxial construction

### Mechanical data

-Case: Molded plastic

-Epoxy: UL 94V-0 rate flame retardant

-Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed

-Polarity: Color band denotes cathode end

-Mounting position: Any -Weight: 1.2 grams

## ■ Maximum ratings and Electrical characteristics

| Parameters  |            | SB3100V(H)  | UNIT  |
|---|------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage                        |            | 100         | V     |
| Maximum RMS Voltage   |            | 70          | V     |
| Maximum DC Blocking Voltage                                   |            | 100         | V     |
| Maximum Average Forward Rectified Current                     |            | 3           | А     |
| Peak Forward Surge Current                                    |            | 80          | А     |
| Maximum Instantaneous Forward Voltage at 3A                   | Tc = 25°C  | 0.62        | V     |
|   | Tc = 125°C | 0.56        | V     |
| Maximum Average Reverse Current at Rated  DC Blocking Voltage | Tc = 25°C  | 0.2         | mΛ    |
|   | Tc = 125°C | 50          | mA mA |
| Typical Junction Capacitance                                  |            | 500         | pF    |
| Typical Thermal Resistance R <sub>e</sub> JA                  |            | 25          | °C/W  |
| Operating and Storage Temperature Range                       |            | -50 to +150 | °C    |

Note: 1. H means Halogen-Free

2. Mounted on P.C.B with copper pad size 16mm x 16mm, vertical P.C.B 9.5mm lead lengths

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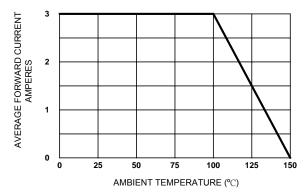
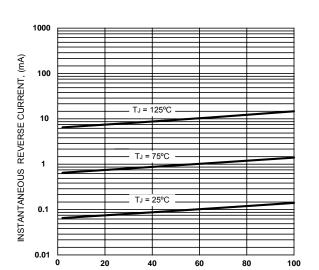


Figure 1. Forward Current Derating Curve



PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)
Figure 3. Typical Reverse Characteristics

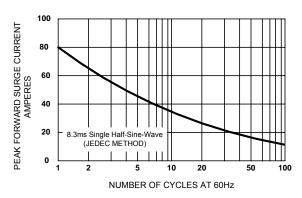


Figure 2. Maximum Non-repetitive Surge Current

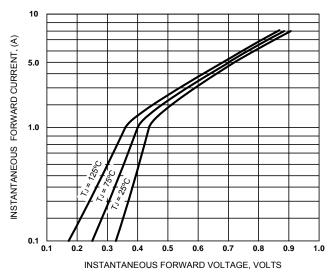


Figure 4. Typical Forward Characteristics

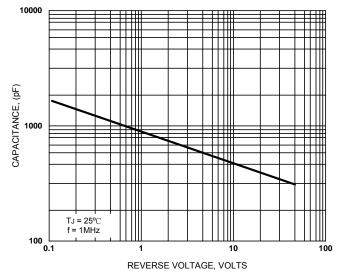
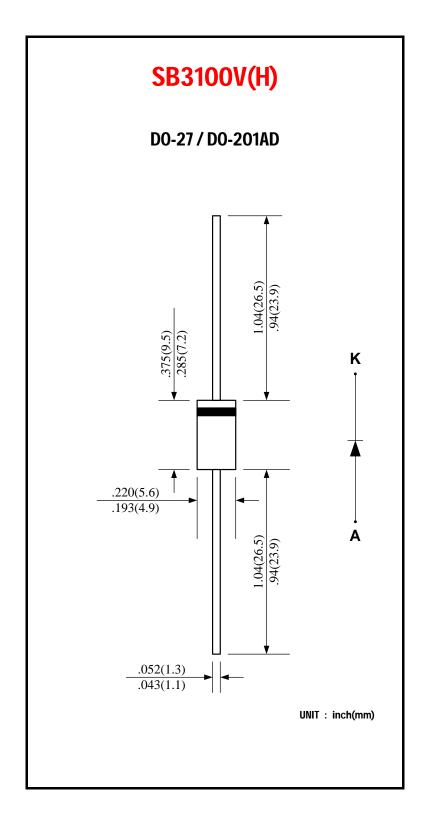


Figure 5. Typical Junction Capacitance





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