



# SB270 thru SB2B0

2.0 Amps. Schottky Barrier Rectifiers  
Voltage Range 70 to 100 Volts Forward Current 2.0 Amperes

## Features

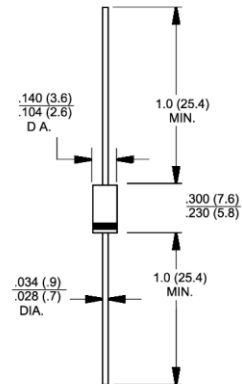
- ◆ Metal-Semiconductor junction with guard ring
- ◆ Epitaxial construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ The plastic material carries UL recognition 94V-0
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



DO-204AC (DO-15)

## Mechanical Data

- ◆ Case : JEDEC DO-204AC(DO-15) molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.014 ounce, 0.39 gram
- ◆ Mounting position : Any



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Parameter                                                                                                               | Symbols         | SB270        | SB280 | SB290 | SB2B0 | Units              |
|-------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|-------|-------|-------|--------------------|
| Maximum repetitive peak reverse voltage                                                                                 | $V_{RRM}$       | 70           | 80    | 90    | 100   | Volts              |
| Maximum RMS voltage                                                                                                     | $V_{RMS}$       | 49           | 56    | 63    | 70    | Volts              |
| Maximum DC blocking voltage                                                                                             | $V_{DC}$        | 70           | 80    | 90    | 100   | Volts              |
| Maximum average forward rectified current<br>@ $T_J = 100^\circ\text{C}$                                                | $I_{AV}$        | 2.0          |       |       |       | Amps               |
| Peak forward surge current<br>8.3ms single half sine-wave<br>superimposed on rated load (JEDEC Method)                  | $I_{FSM}$       | 60.0         |       |       |       | Amps               |
| Maximum forward voltage at<br>2.0A DC<br>@ $T_J = 25^\circ\text{C}$<br>@ $T_J = 100^\circ\text{C}$                      | $V_F$           | 0.79<br>0.69 |       |       |       | Volts              |
| Maximum DC reverse current<br>at rated DC blocking voltage<br>@ $T_J = 25^\circ\text{C}$<br>@ $T_J = 100^\circ\text{C}$ | $I_R$           | 0.5<br>10    |       |       |       | mA                 |
| Typical thermal resistance (Note 1)                                                                                     | $R_{\theta JA}$ | 20           |       |       |       | $^\circ\text{C/W}$ |
| Typical junction capacitance (Note 2)                                                                                   | $C_J$           | 50           |       |       |       | pF                 |
| Operating temperature range                                                                                             | $T_J$           | -55 to +125  |       |       |       | $^\circ\text{C}$   |
| Storage temperature range                                                                                               | $T_{STG}$       | -55 to +150  |       |       |       | $^\circ\text{C}$   |

- Notes:**
1. Thermal Resistance Junction to Ambient.
  2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

# RATINGS AND CHARACTERISTIC CURVES

