

# **SB220 thru SB260**

#### SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 20 to 60 Volts FORWARD CURRENT - 2.0 Amperes

#### **FEATURES**

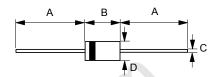
- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### **MECHANICAL DATA**

Case: JEDEC DO-15 molded plastic
Polarity: Color band denotes cathode
Weight: 0.015 ounces, 0.4 grams

• Mounting position : Any

## DO-15



|                              | DO-15  |        |  |  |  |
|------------------------------|--------|--------|--|--|--|
| Dim.                         | Min.   | Max.   |  |  |  |
| Α                            | 25.4   | -      |  |  |  |
| В                            | 5.80   | 7.60   |  |  |  |
| С                            | 0.71 Ø | 0.86 Ø |  |  |  |
| D                            | 2.60 Ø | 3.60 Ø |  |  |  |
| All Dimensions in millimeter |        |        |  |  |  |

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

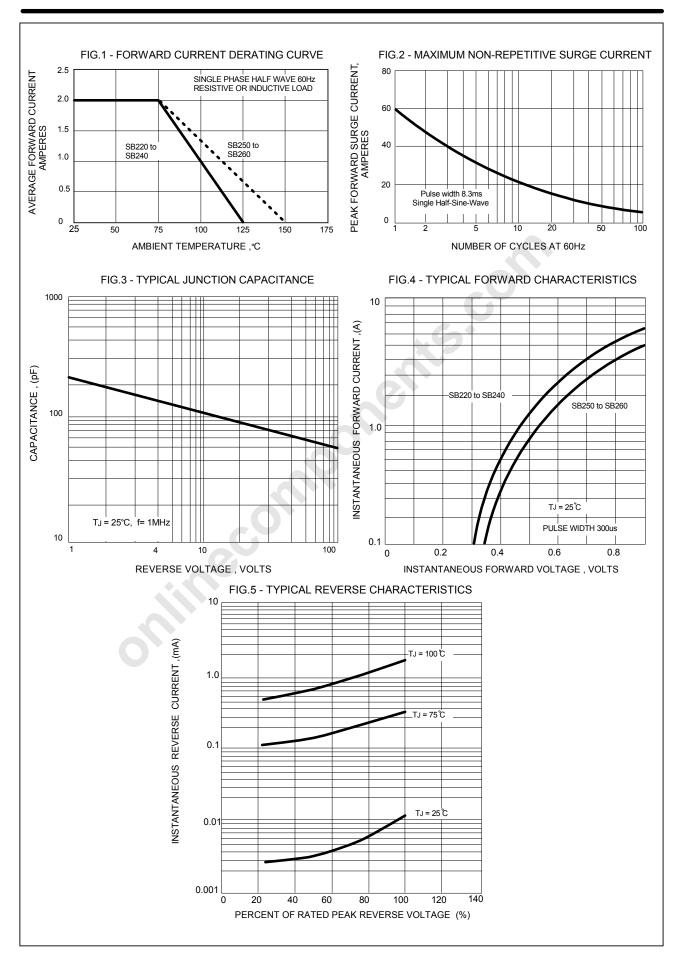
| CHARACTERISTICS  | SYMBOL | SB220     | SB230       | SB240       | SB250  | SB260 | UNIT |  |  |  |
|--|--------|-----------|-------------|-------------|--------|-------|------|--|--|--|
| Maximum Recurrent Peak Reverse Voltage   | VRRM   | 20        | 30          | 40          | 50     | 60    | V    |  |  |  |
| Maximum RMS Voltage  | VRMS   | 14        | 21          | 28          | 35     | 42    | V    |  |  |  |
| Maximum DC Blocking Voltage  | VDC    | 20        | 30          | 40          | 50     | 60    | V    |  |  |  |
| Maximum Average Forward Rectified Current @TA=75°C                                       | I(AV)  | 2.0       |             |             |        |       | А    |  |  |  |
| Peak Forward Surge Current<br>8.3ms single half sine-wave<br>super imposed on rated load | IFSM   |           |             | 60          |        |       | А    |  |  |  |
| Maximum forward Voltage at 2.0A DC   |        |           | 0.55        |             | C      | ).7   |      |  |  |  |
| Maximum forward Voltage at 1.5A DC   | VF     |           |             |             | 0.     | .65   | V    |  |  |  |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25℃ @TJ=100℃                 | lR     | 0.5<br>15 |             |             |        |       | mA   |  |  |  |
| Typical Thermal Resistance (Note 1)  | Reja   |           |             | 20          |        |       | °C/W |  |  |  |
| Typical Junction<br>Capacitance (Note 2)   | Сл     |           |             | 150         |        |       | pF   |  |  |  |
| Operating Temperature Range  | TJ     |           | -55 to +125 |             | -55 to | + 150 | ℃    |  |  |  |
| Storage Temperature Range  | Tstg   |           |             | -55 to +150 | 1      |       | °C   |  |  |  |

NOTES: 1.Thermal Resistance Junction to Ambient.

2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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