

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **70 to 100** Volts  
FORWARD CURRENT - **1.0** Ampere

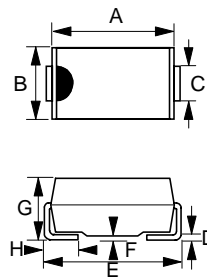
**FEATURES**

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 0.002 ounces, 0.064 grams

**SMA**



| SMA  |      |      |
|------|------|------|
| DIM. | MIN. | MAX. |
| A    | 4.06 | 4.57 |
| B    | 2.29 | 2.92 |
| C    | 1.27 | 1.63 |
| D    | 0.15 | 0.31 |
| E    | 4.83 | 5.59 |
| F    | 0.05 | 0.20 |
| G    | 2.01 | 2.62 |
| H    | 0.76 | 1.52 |

All Dimensions in millimeter

**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%

| CHARACTERISTICS  | SYMBOL           | B170         | B180 | B190 | B1100 | UNIT |
|--|------------------|--------------|------|------|-------|------|
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub> | 70           | 80   | 90   | 100   | V    |
| Maximum RMS Voltage  | V <sub>RMS</sub> | 49           | 56   | 63   | 70    | V    |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>  | 70           | 80   | 90   | 100   | V    |
| Maximum Average Forward Rectified Current @T <sub>L</sub> =100°C                                     | I(AV)            | 1.0          |      |      |       | A    |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)    | I <sub>FSM</sub> | 30           |      |      |       | A    |
| Maximum forward Voltage at 1.0A DC @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C                      | V <sub>F</sub>   | 0.79<br>0.69 |      |      |       | V    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C | I <sub>R</sub>   | 0.5<br>5.0   |      |      |       | mA   |
| Typical Junction Capacitance (Note 1)  | C <sub>J</sub>   | 30           |      |      |       | pF   |
| Typical Thermal Resistance (Note 2)  | R <sub>θJL</sub> | 25           |      |      |       | °C/W |
| Operating Temperature Range  | T <sub>J</sub>   | -55 to +125  |      |      |       | °C   |
| Storage Temperature Range  | T <sub>STG</sub> | -55 to +150  |      |      |       | °C   |

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Thermal Resistance Junction to Lead.

