



**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **20 to 200** Volts  
 FORWARD CURRENT - **3.0** Amperes

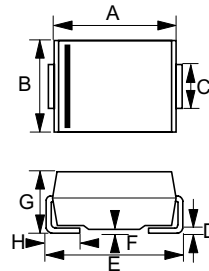
**FEATURES**

- 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 SMA molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.062 grams
- Mounting position : Any

**SMA**



| SMA  |      |       |
|------|------|-------|
| DIM. | MIN. | MAX.  |
| A    | 3.99 | 4.50  |
| B    | 2.54 | 2.79  |
| C    | 1.32 | 1.47  |
| D    | 0.15 | 0.31  |
| E    | 4.93 | 5.28  |
| F    | 0.05 | 0.127 |
| G    | 1.98 | 2.29  |
| 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%

| PARAMETER  | SYMBOL          | B320A       | B330A | B340A | B350A | B360A | B380A | B3100A | B3150A | B3200A | UNIT |    |
|--|-----------------|-------------|-------|-------|-------|-------|-------|--------|--------|--------|------|----|
| Maximum repetitive peak reverse voltage  | $V_{RRM}$       | 20          | 30    | 40    | 50    | 60    | 80    | 100    | 150    | 200    | V    |    |
| Maximum RMS voltage  | $V_{RMS}$       | 14          | 21    | 28    | 35    | 42    | 56    | 70     | 105    | 140    | V    |    |
| Maximum DC blocking voltage  | $V_{DC}$        | 20          | 30    | 40    | 50    | 60    | 80    | 100    | 150    | 200    | V    |    |
| Maximum average forward rectified current  | $I_F$           | 3.0         |       |       |       |       |       |        |        |        | A    |    |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$       | 80.0        |       |       |       |       |       |        |        |        | A    |    |
| Maximum Instantaneous Forward Voltage @ 3.0A                                       | $V_F$           | 0.50        |       |       | 0.70  |       | 0.85  |        | 0.87   | 0.90   | V    |    |
| Maximum DC Reverse Current @ TA=25°C   | $I_R$           | 0.5         |       |       |       |       | 0.2   |        |        |        |      | mA |
| at Rated DC Blocking Voltage @ TA=100°C  |                 | 10.0        |       |       |       |       | 5.0   |        |        |        |      |    |
| Typical Junction Capacitance   | $C_j$           | 180         |       |       | 150   |       | 110   |        | 100    | 80     | pF   |    |
| Typical Thermal Resistance   | $R_{\theta JA}$ | 70          |       |       |       |       |       |        |        |        | °C/W |    |
| Operating Temperature Range  | $T_J$           | -55 to +125 |       |       |       |       |       |        |        |        | °C   |    |
| Storage Temperature Range  | $T_{STG}$       | -55 to +150 |       |       |       |       |       |        |        |        | °C   |    |



FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

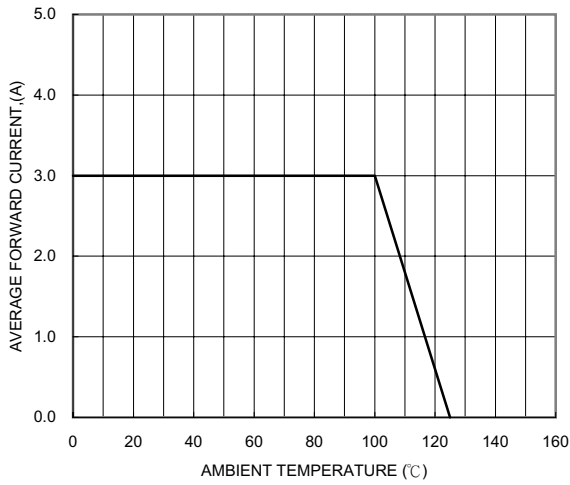


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

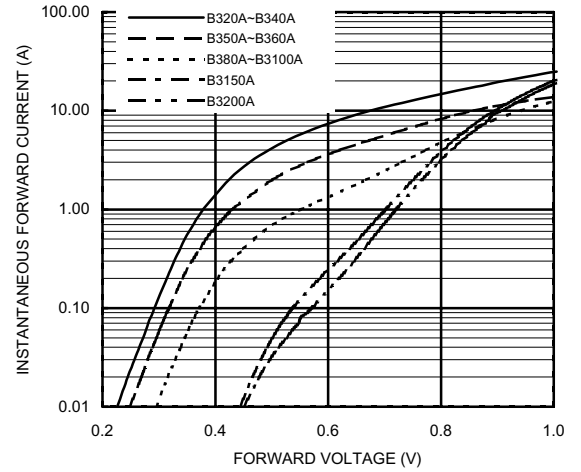


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

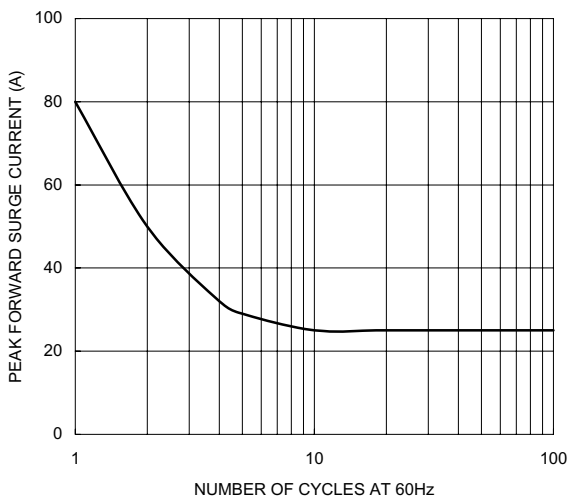


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

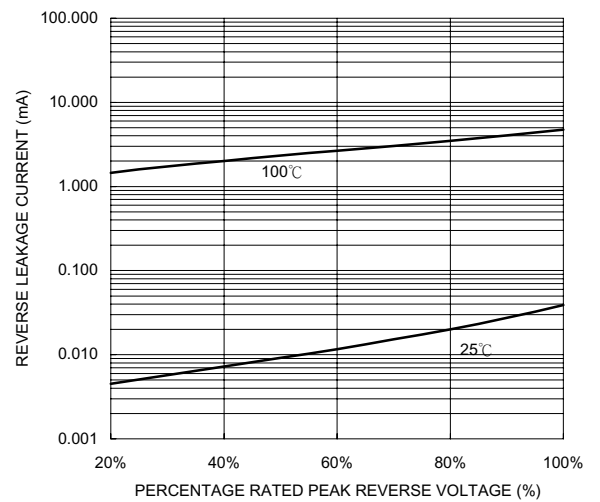


FIG. 5-TYPICAL JUNCTION CAPACITANCE

