



SCHOTTKY BARRIER RECTIFIERS

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

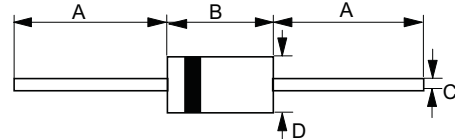
FEATURES

- 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 DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.071grams
- Mounting position : Any

DO-201AD



| DO-201AD | | |
|---------------------------|--------------------|--------------------|
| Dim. | Min. | Max. |
| A | 25.4 | - |
| B | 8.50 | 9.50 |
| C | 1.20 \varnothing | 1.30 \varnothing |
| D | 5.0 \varnothing | 5.60 \varnothing |
| Dimensions in 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 | SYMBOL | SB 320 | SB 330 | SB 340 | SB 350 | SB 360 | SB 380 | SB 3100 | SB 3150 | SB 3200 | UNIT |
|--|--------------------------------|-------------|--------|--------|--------|--------|--------|---------|---------|---------|------|
| Maximum repetitive peak reverse voltage | VRRM | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum RMS voltage | VRMS | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Maximum DC blocking voltage | VDC | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum average forward rectified current | IF | 3.0 | | | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | IFSM | 80.0 | | | | | | | | | A |
| Maximum instantaneous Forward Voltage @3.0A | VF | 0.5 | | 0.70 | | 0.85 | | 0.87 | 0.9 | | V |
| Maximum DC Reverse Current @TA=25°C | IR | 0.5 | | | | | 0.2 | | | | mA |
| at Rated DC Blocking Voltage @TA=100°C | | 10.0 | | | | | 5.0 | | | | |
| Typical Junction Capacitance | CJ | 180 | | 150 | | 110 | | 100 | 80 | | pF |
| Typical Thermal Resistance | R θ JA R θ JC | 60 15 | | | | | | | | | °C/W |
| Operating Temperature Range | TJ | -55 to +125 | | | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to +150 | | | | | | | | | °C |



FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

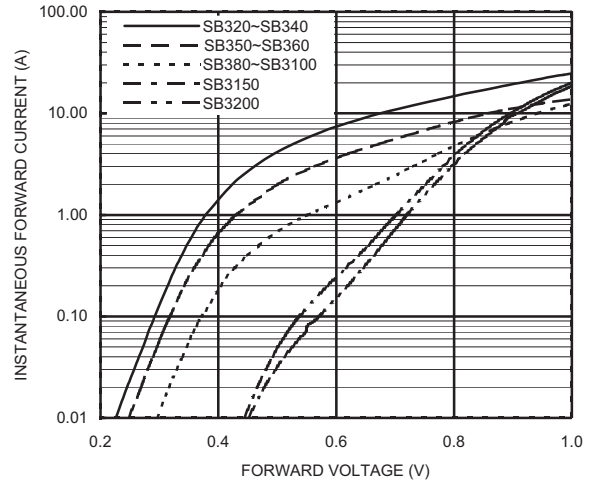
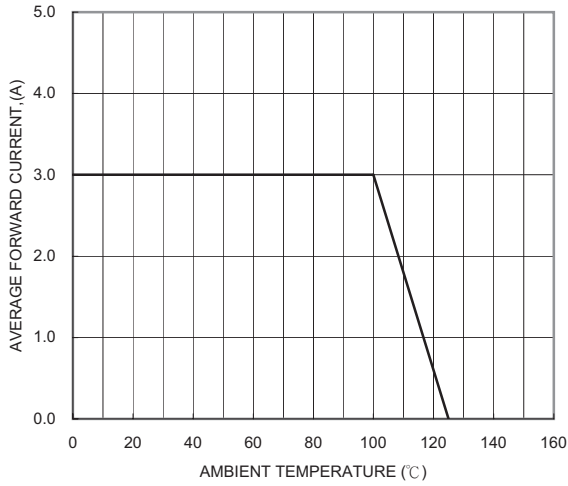


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

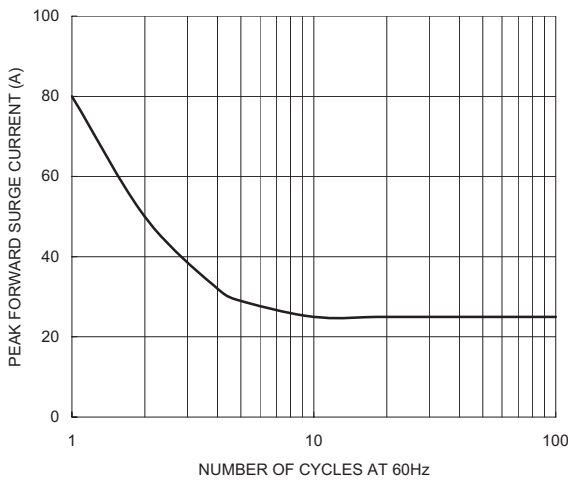


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

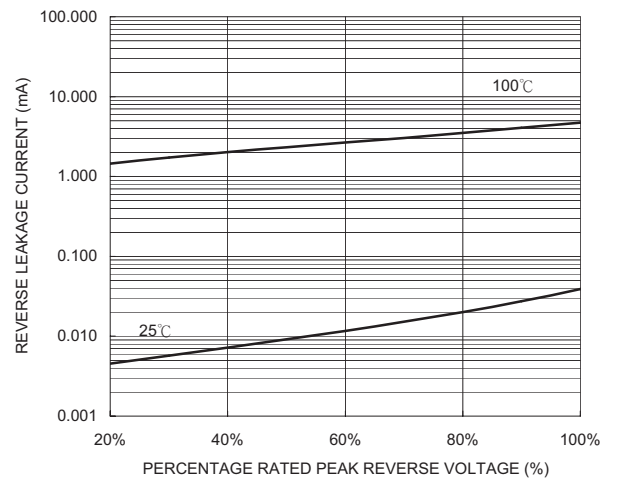


FIG. 5-TYPICAL JUNCTION CAPACITANCE

