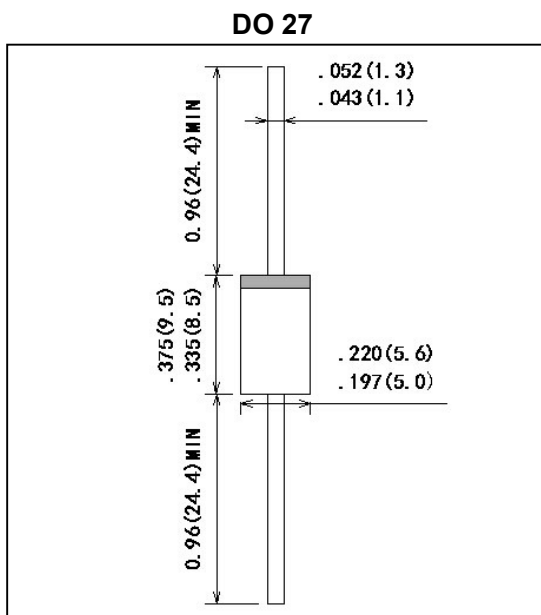


## Schottky Barrier Rectifier

### 3 A / 100 V

#### Package Outline Dimensions in mm (inches)



#### Features

- Metal-Semiconductor junction with guarding
- Very low forward voltage drop
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

#### Typical Applications

- For use in in low voltage, high frequency inverters.

#### Mechanical Data

- Case:DO27 Plastic Package
- Polarity:Color band denotes cathode end

#### Maximum ratings

Ratings at TA=25°C (unless otherwise specified)

| Parameter                                                                          | Symbol | SR3100    | Unit  |
|------------------------------------------------------------------------------------|--------|-----------|-------|
| Maximum recurrent peak reverse voltage                                             | VRRM   | 100       | V     |
| Maximum RMS voltage                                                                | VRMS   | 70        | V     |
| Maximum DC blocking voltage                                                        | VDC    | 100       | V     |
| Maximum average forward rectified current (Note1)                                  | IF(AV) | 3.0       | A     |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | IFSM   | 80        | A     |
| Storage temperature range                                                          | TS     | -55 ~ 150 | °C    |
| Operating Junction temperature range                                               | Tj     | -55 ~ 150 | °C    |
| Thermal Resistance (Note1)                                                         | RthJL  | 20        | °C /W |

Note1: Vertical P.C.B. mounting, 12.7 mm lead length with 63.5 mm x 63.5 mm copper pad.

#### Electrical characteristics

Ratings at TA=25°C (unless otherwise specified)

| Parameter                                               | Test Conditions | Symbol | SR3100 | Unit |
|---------------------------------------------------------|-----------------|--------|--------|------|
| Maximum forward voltage                                 | IF=3.0 A        | VF     | 0.85   | V    |
| Maximum DC reverse current at rated DC blocking voltage | TA=25°C         | IR     | 0.1    | mA   |
|                                                         | TA=100°C        |        | 5      |      |

## Characteristics Curves

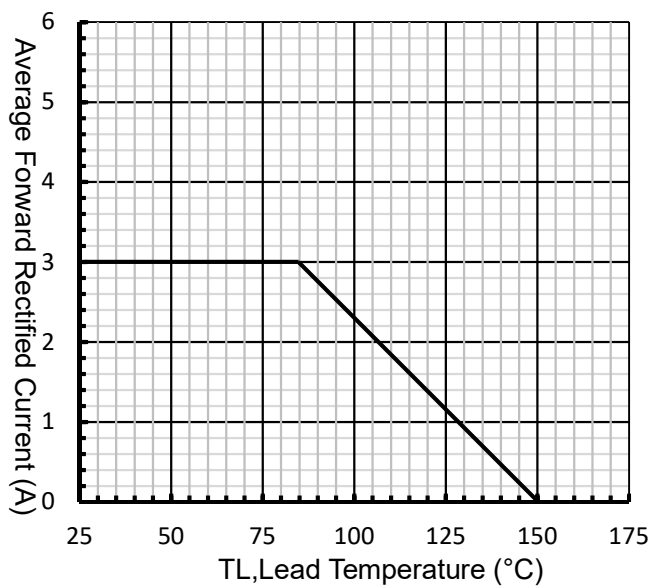


Fig.1 FORWARD CURRENT DERATING CURVE

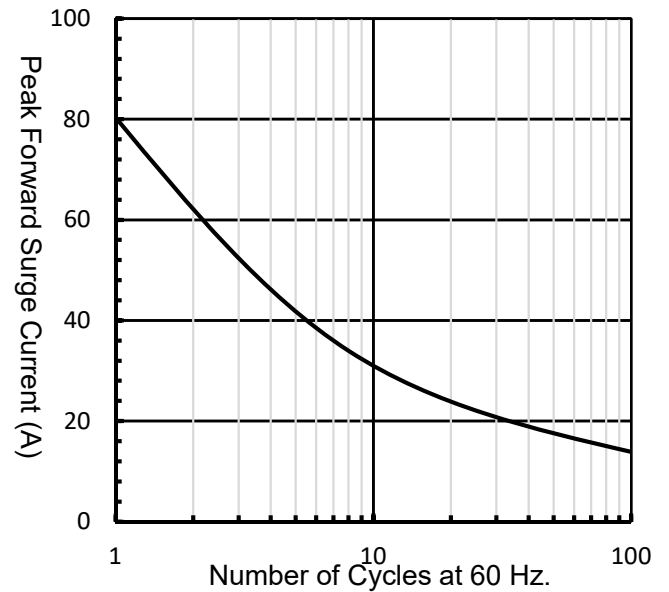


Fig.2 MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

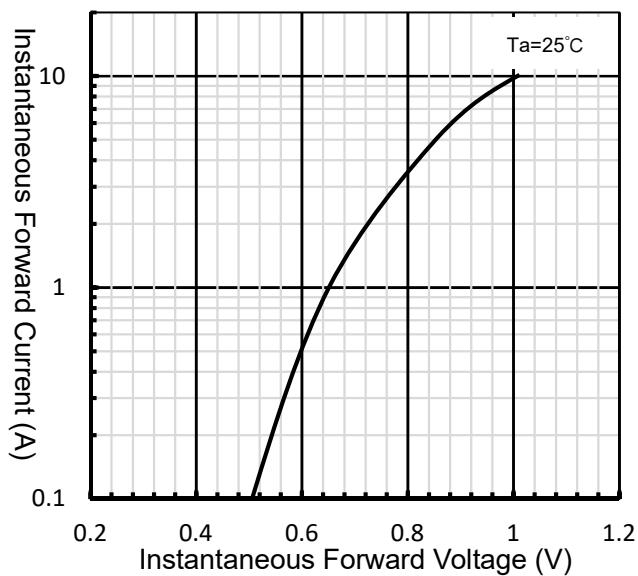


Fig. 3 TYPICAL FORWARD CHARACTERISTIC

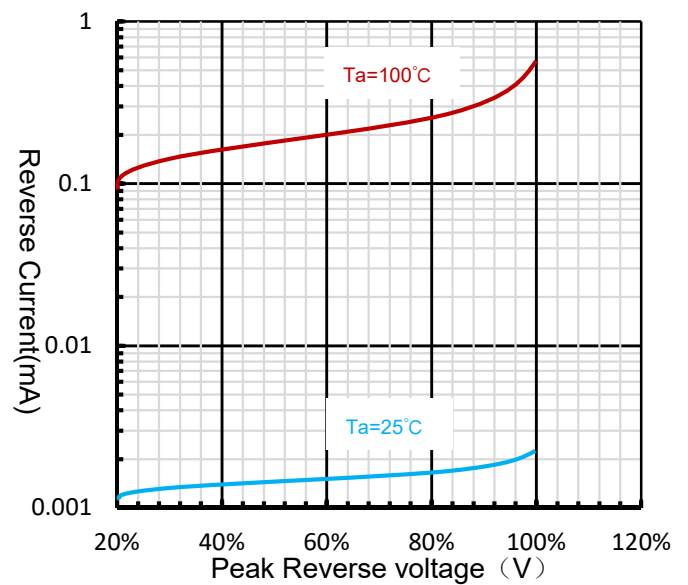


Fig. 4 Typical Reverse Characteristics