

## SR320 Thru SR3100

Voltage: 20 - 100 Volts

Current: 3.0 Amps

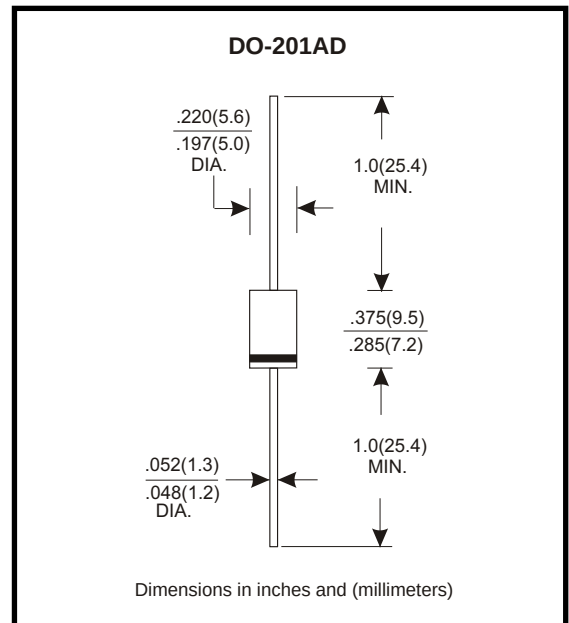


### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

### Mechanical data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Weight: 1.10 grams



### Maximum Ratings and Electrical Characteristics

Rating 25 C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| TYPE NUMBER                                                                                           | SR320      | SR330 | SR340 | SR350      | SR360 | SR380 | SR3100 | UNITS |
|-------------------------------------------------------------------------------------------------------|------------|-------|-------|------------|-------|-------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                | 20         | 30    | 40    | 50         | 60    | 80    | 100    | V     |
| Maximum RMS Voltage                                                                                   | 14         | 21    | 28    | 35         | 42    | 56    | 70     | V     |
| Maximum DC Blocking Voltage                                                                           | 20         | 30    | 40    | 50         | 60    | 80    | 100    | V     |
| Maximum Average Forward Rectified Current<br>See Fig. 1                                               | 3.0        |       |       |            |       |       |        | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 80         |       |       |            |       |       |        | A     |
| Maximum Instantaneous Forward Voltage at 3.0A                                                         | 0.55       |       |       | 0.70       |       | 0.85  |        | V     |
| Maximum DC Reverse Current<br>Ta=25°C                                                                 | 3.0        |       |       |            |       |       |        | mA    |
| at Rated DC Blocking Voltage<br>Ta=100°C                                                              | 30         |       |       |            |       |       |        | mA    |
| Typical Junction Capacitance (Note1)                                                                  | 250        |       |       |            |       |       |        | pF    |
|                                                                                                       | 20         |       |       |            |       |       |        | °C/W  |
| Operating Temperature Range Tj                                                                        | -65 — +125 |       |       | -65 — +150 |       |       |        | °C    |
| Storage Temperature Range Tstg                                                                        | -65 — +150 |       |       |            |       |       |        | °C    |

#### NOTES:

- Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

## Rating and Characteristic Curves (SR320 Thru SR3100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

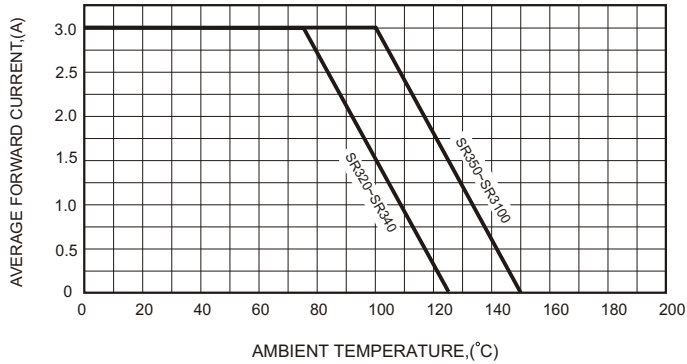


FIG.2-TYPICAL FORWARD CHARACTERISTICS

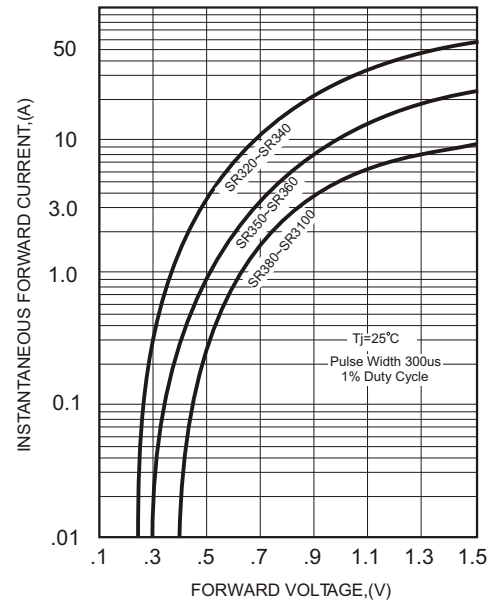


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

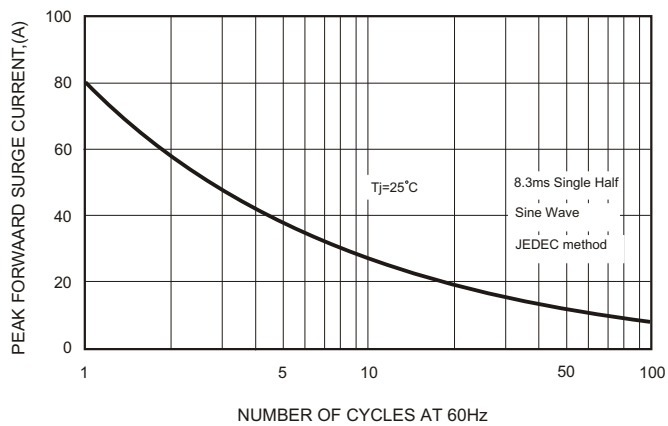


FIG.4-TYPICAL JUNCTION CAPACITANCE

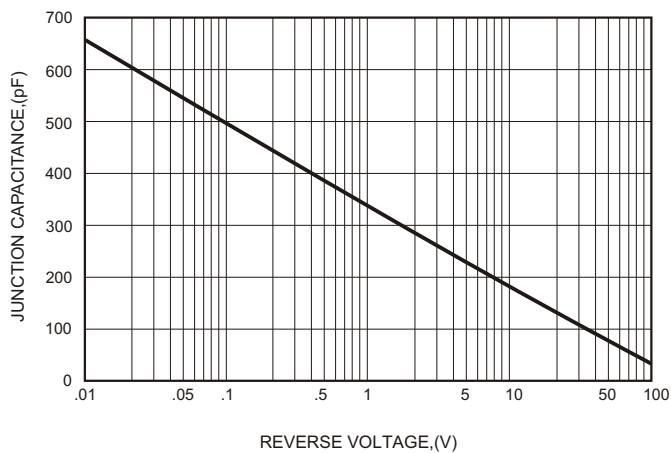


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

