



# SR520 THRU SR5100 5 A Schottky Barrier Rectifiers

**Voltage Range 20 to 100 Volts  
Current 5.0 Amperes**

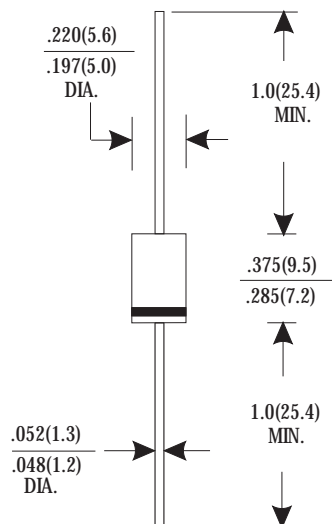
## Features

- \* 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
- \* Mounting position: Any
- \* Weight: 1.2 grams

DO-201AD



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

| Type Number   | SR520   | SR530 | SR540 | SR550 | SR560 | SR580 | SR5100 | 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 See Fig. 1  | 5.0     |       |       |       |       |       |        | A     |
| Peak Forward Surge Current, 8.3 ms Single Half Sinewave - Superimposed on Rated Load method (JEDEC) | 100     |       |       |       |       |       |        | A     |
| Maximum Instantaneous Forward Voltage @ 5.0A  | 0.55    |       | 0.70  |       | 0.85  |       |        | V     |
| Maximum D.C. Reverse Current @ T <sub>A</sub> =25°C   | 2       |       |       |       |       |       |        | mA    |
| At Rated DC Blocking Voltage @ T <sub>A</sub> =100°C  | 50      |       |       |       |       |       |        | mA    |
| Typical Junction Capacitance (Note 1)   | 380     |       |       |       |       |       |        | pF    |
| Typical Thermal Resistance R <sub>JA</sub> (Note 2)   | 10      |       |       |       |       |       |        | °C/W  |
| Operating Junction Temperature Range T <sub>J</sub>   | -50+125 |       |       |       |       |       |        | °C    |
| Storage Temperature Range T <sub>STG</sub>  | -65+150 |       |       |       |       |       |        | °C    |

### Notes:

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



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## RATING AND CHARACTERISTIC CURVES (SR520 THRU SR5100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

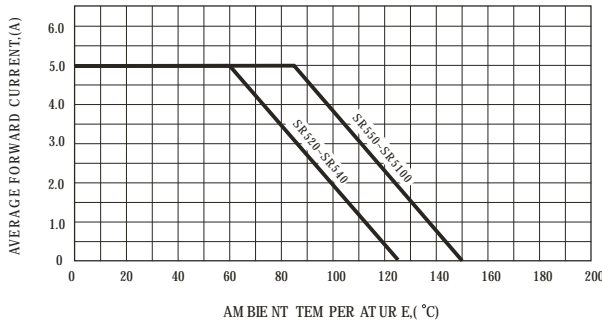


FIG.2-TYPICAL FORWARD CHARACTERISTICS

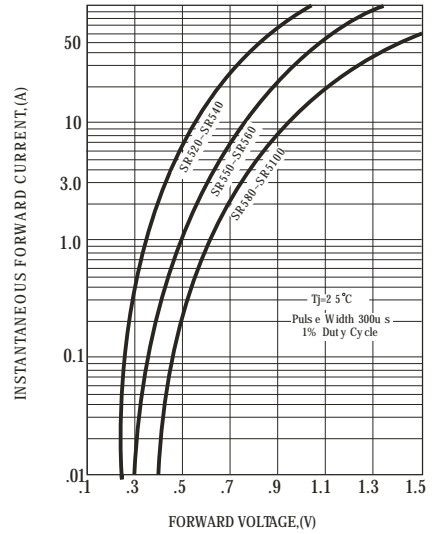


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

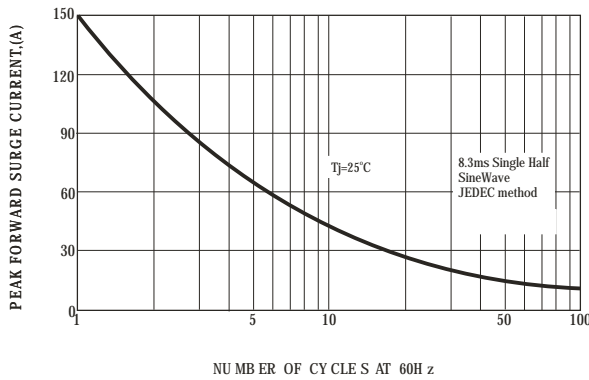


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

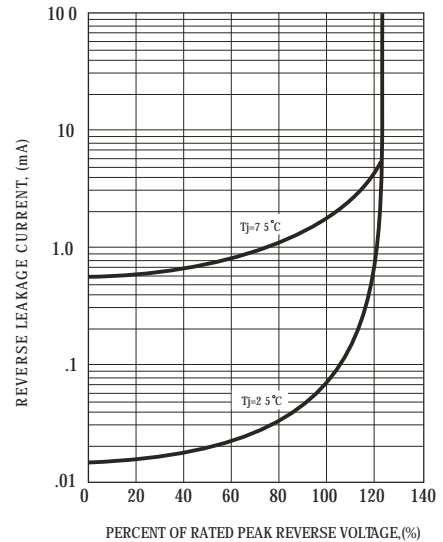


FIG.4-TYPICAL JUNCTION CAPACITANCE

