



SR802 - SR815

8.0 AMPS. Schottky Barrier Rectifiers

DO-201AD

Features

- ◊ Low power loss, high efficiency.
- ◊ High current capability, Low VF.
- ◊ High reliability
- ◊ High surge current capability.
- ◊ Epitaxial construction.
- ◊ Guard-ring for transient protection.
- ◊ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ◊ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ◊ Cases: DO-201AD molded plastic
- ◊ Epoxy: UL 94V-0 rate flame retardant
- ◊ Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ◊ Polarity: Color band denotes cathode
- ◊ High temperature soldering guaranteed: 260°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ◊ Weight: 1.10 grams

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%

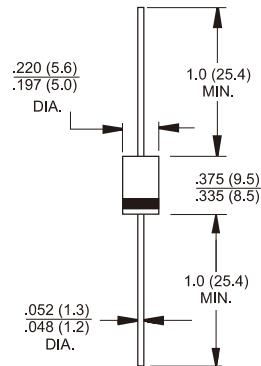
| Type Number | Symbol | SR 802 | SR 803 | SR 804 | SR 805 | SR 806 | SR 809 | SR 810 | SR 815 | Units | | | | |
|---|--------------------|-------------|--------|--------|-------------|--------|--------|--------|--------|-------|--|--|--|--|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 90 | 100 | 150 | V | | | | |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 63 | 70 | 105 | V | | | | |
| Maximum DC Blocking Voltage | V _D | 20 | 30 | 40 | 50 | 60 | 90 | 100 | 150 | V | | | | |
| Maximum Average Forward Rectified Current See Fig. 1 | I _{F(AV)} | 8.0 | | | | | | | A | | | | | |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I _{FSM} | 150 | | | | | | | A | | | | | |
| Maximum Instantaneous Forward Voltage @8.0A | V _F | 0.55 | | 0.70 | | 0.92 | | 1.02 | V | | | | | |
| Maximum D.C. Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C (Note 1) @ T _A =125°C | I _R | 0.5 | | | 0.1 | | | mA | | | | | | |
| Typical Junction Capacitance (Note 2) | C _j | 500 | | | 270 | | | 165 | | | | | | |
| Typical Thermal Resistance (Note 3) | R _{θJA} | 40 | | | | | | | °C/W | | | | | |
| Operating Junction Temperature Range | T _J | -65 to +125 | | | -65 to +150 | | | °C | | | | | | |
| Storage Temperature Range | T _{STG} | -65 to +150 | | | | | | | °C | | | | | |

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

3. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

Version: D10

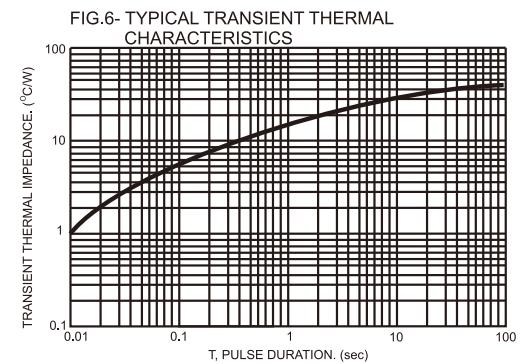
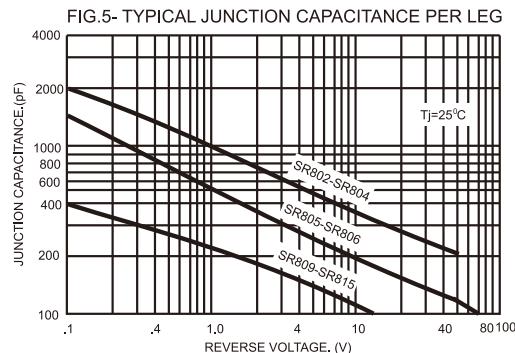
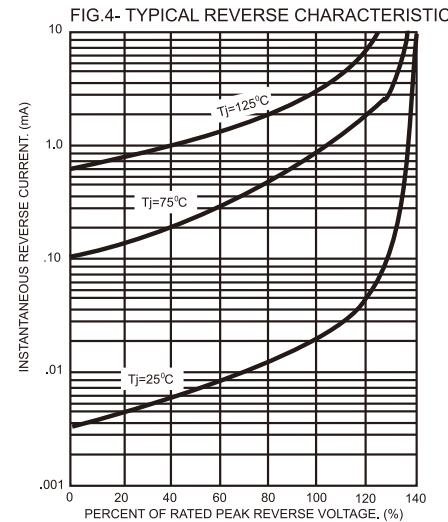
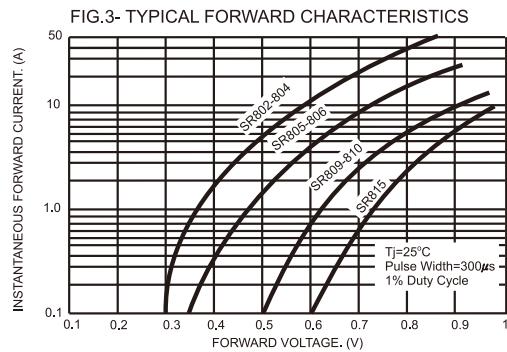
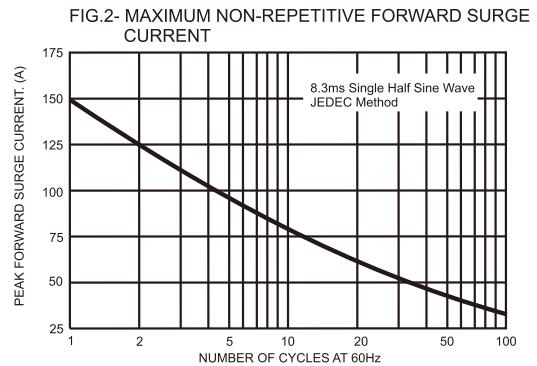
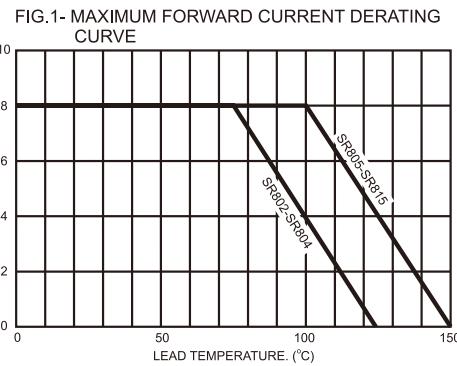


Dimensions in inches and (millimeters)

Marking Diagram



SR8XX = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

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