



Schottky Barrier Rectifiers

SR8A20-G Thru SR8A100-G

Reverse Voltage: 20 ~ 100 Volts

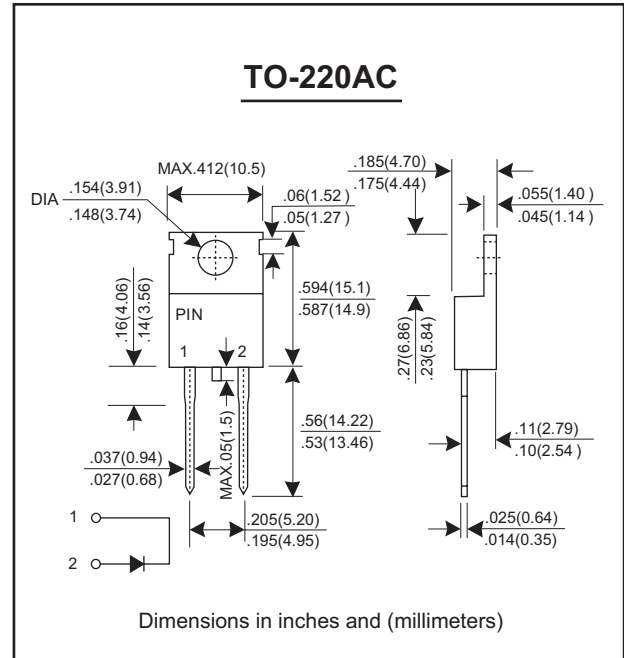
Current: 8.0 Amp

Features:

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

Mechanical Data:

- Case: TO-220AC molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202, method 208
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 2.03 grams



Maximum Ratings and Electrical Characteristics

Rating 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 | SR8A20-G | SR8A40-G | SR8A60-G | SR8A80-G | SR8A100-G | Unit |
|---|------------|-------------|----------|----------|----------|-----------|------|
| Max. Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 40 | 60 | 80 | 100 | V |
| Max. RMS Voltage | V_{RMS} | 14 | 28 | 42 | 56 | 70 | V |
| Max. DC Blocking Voltage | V_{DC} | 20 | 40 | 60 | 80 | 100 | V |
| Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 150 | | | | | A |
| Max. Average Forward Rectified Current $T_c=100^\circ\text{C}$ | $I_{(AV)}$ | 8.0 | | | | | A |
| Instantaneous Forward Voltage at 1.0A | V_F | 0.55 | 0.65 | 0.75 | 0.85 | | V |
| Max. DC Reverse Current @ $T_j = 25^\circ\text{C}$ | I_R | 1.0 | | | | | mA |
| At Rated DC Blocking Voltage @ $T_j = 100^\circ\text{C}$ | | 50 | | | | | |
| Typical junction Capacitance (Note1) | C_J | 450 | | | | | pF |
| Max. Operating Junction Temperature | T_j | -55 to +125 | | | | | °C |
| Storage Temperature | T_{STG} | -55 to +150 | | | | | °C |

Note1: (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

“-G” suffix designates RoHS compliant version



RATINGS AND CHARACTERISTIC CURVES SR8A20-G THRU SR8A100-G

FIG.1 - FORWARD CURRENT DERATING CURVE

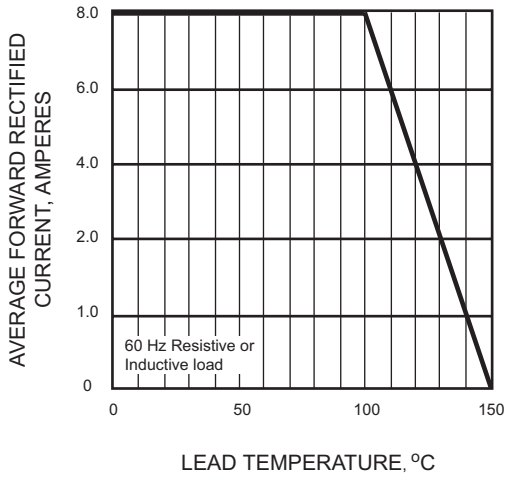


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

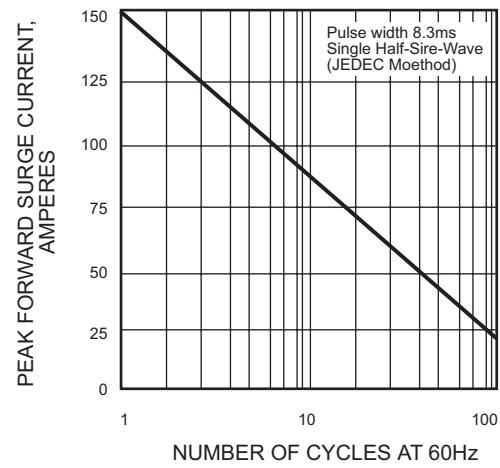


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

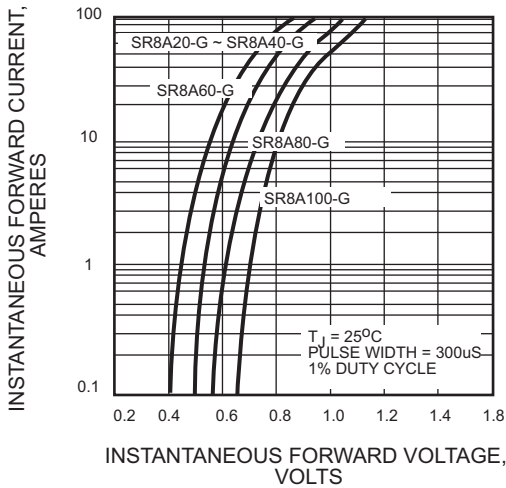


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

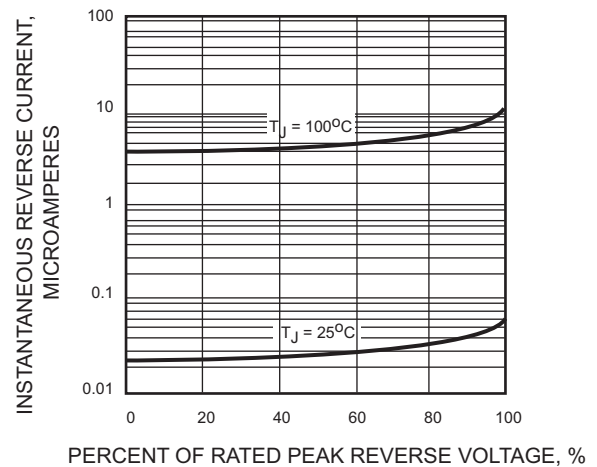


FIG.5 - TYPICAL JUNCTION CAPACITANCE

