

# SR10150CT THRU SR10200CT

# GW

## 10 AMP SCHOTTKY BARRIER RECTIFIERS



### 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: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

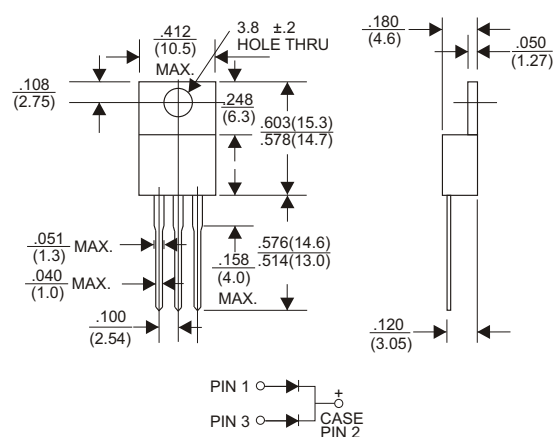
### VOLTAGE RANGE

150 to 200 Volts

### CURRENT

10.0 Amperes

#### TO-220



Dimensions in inches and (millimeters)

## 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                                                                                        | SR10150CT  | SR10200CT | UNITS |
|----------------------------------------------------------------------------------------------------|------------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 150        | 200       | V     |
| Maximum RMS Voltage                                                                                | 105        | 140       | V     |
| Maximum DC Blocking Voltage                                                                        | 150        | 200       | V     |
| Maximum Average Forward Rectified Current                                                          |            |           |       |
| at Tc=95°C                                                                                         | 10         |           | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 150        |           | A     |
| Maximum Instantaneous Forward Voltage at 5A                                                        | 0.95       |           | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 0.5        |           | mA    |
| at Rated DC Blocking Voltage Ta=125°C                                                              | 15         |           | mA    |
| Typical Junction Capacitance (Note1)                                                               | 380        |           | pF    |
| Typical Thermal Resistance RθJC (Note 2)                                                           | 3.0        |           | °C/W  |
| Operating Temperature Range Tj                                                                     | -65 — +150 |           | °C    |
| Storage Temperature Range Tstg                                                                     | -65 — +150 |           | °C    |

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

## RATING AND CHARACTERISTIC CURVES (SR10150CT THRU SR10200CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

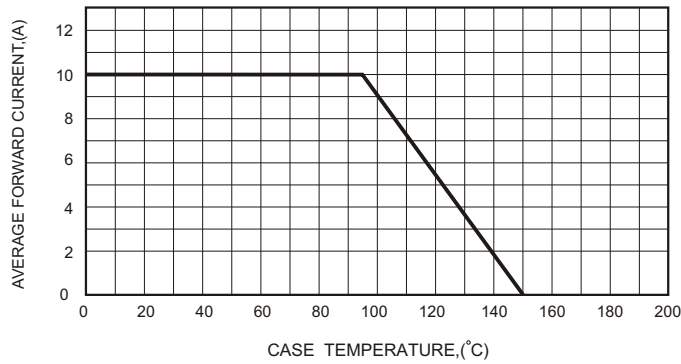


FIG.2-TYPICAL FORWARD CHARACTERISTICS

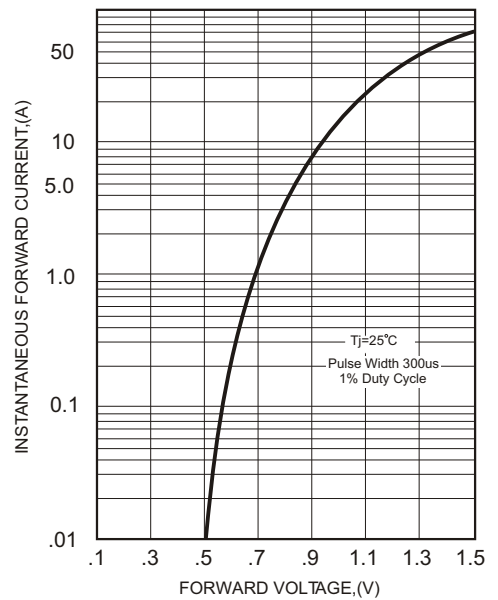


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

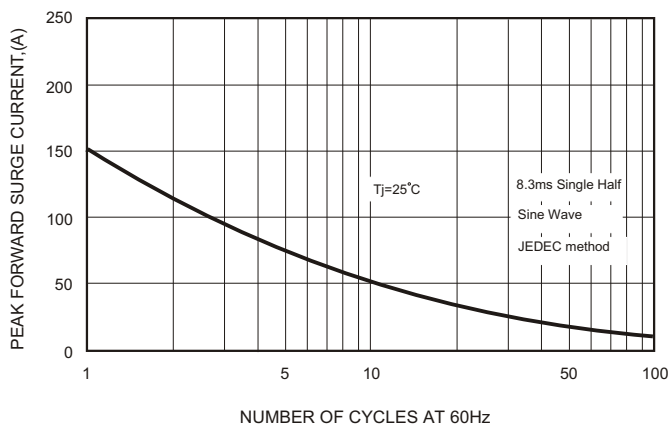


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

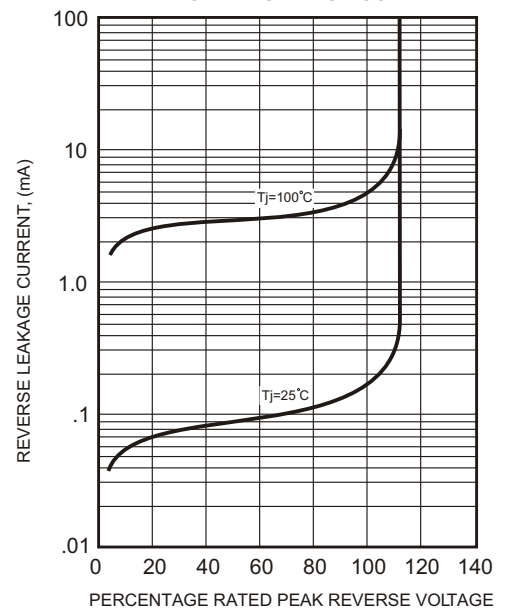


FIG.4-TYPICAL JUNCTION CAPACITANCE

