

# SR2080CT THRU SR20100CT



20 AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

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

## MECHANICAL DATA

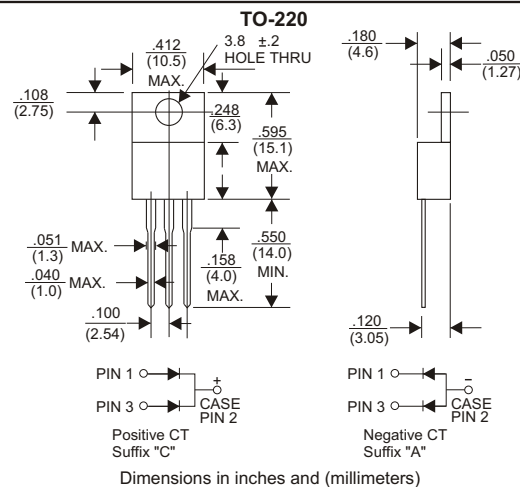
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

## VOLTAGE RANGE

80 to 100 Volts

## CURRENT

20 Ampere



## 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  | SR2080CT   | SR20100CT | UNITS |
|--|------------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage   | 80         | 100       | V     |
| Maximum RMS Voltage  | 56         | 70        | V     |
| Maximum DC Blocking Voltage  | 80         | 100       | V     |
| Maximum Average Forward Rectified Current  |            |           |       |
| .375"(9.5mm) Lead Length at Tc=120°C   | 20         |           | 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 10A   | 0.85       |           | V     |
| Maximum DC Reverse Current Ta=25°C   | 0.1        |           | mA    |
| at Rated DC Blocking Voltage Ta=125°C  | 100        |           | mA    |
| Typical Junction Capacitance (Note1)   | 300        |           | pF    |
| Typical Thermal Resistance R JA (Note 2)   | 2.0        |           | °C/W  |
| Operating Temperature Range Tj   | -55 — +150 |           | °C    |
| Storage Temperature Range Tstg   | -55 — +175 |           | °C    |

### NOTES:

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

## RATING AND CHARACTERISTIC CURVES (SR2080CT THRU SR20100CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

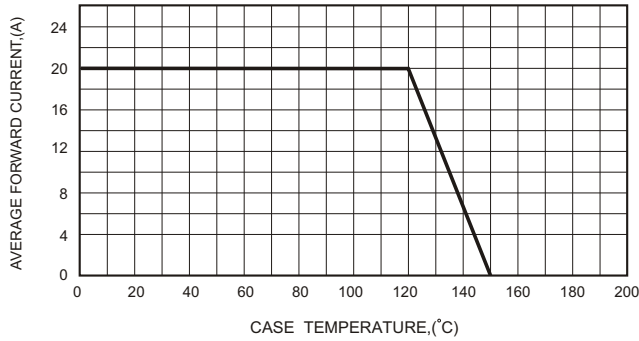


FIG.2-TYPICAL FORWARD CHARACTERISTICS

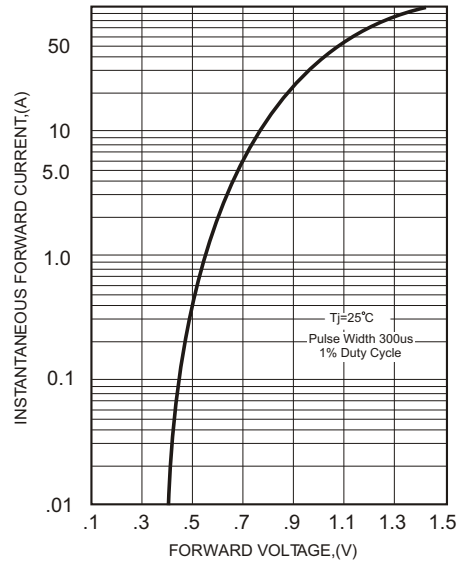


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

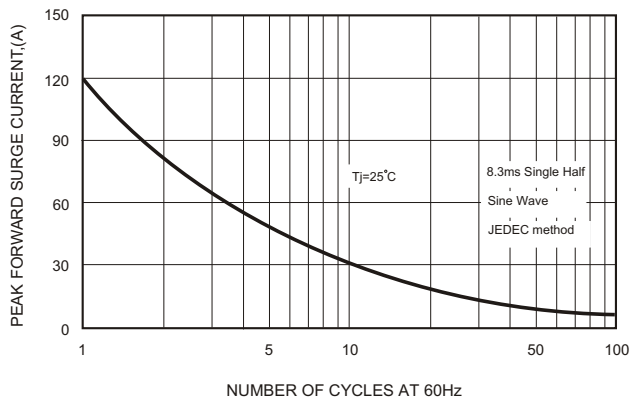


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

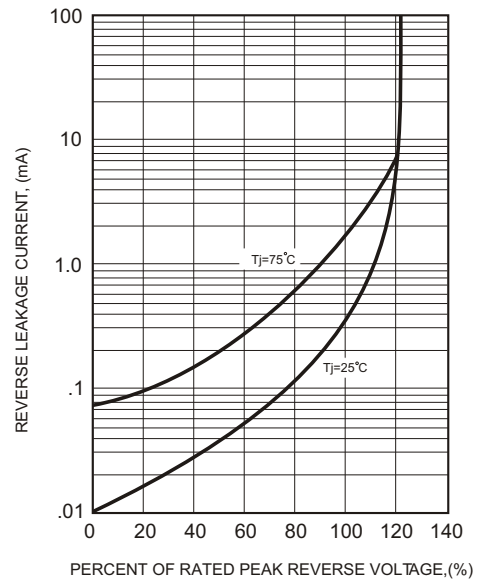


FIG.4-TYPICAL JUNCTION CAPACITANCE

