

# SR2020C thru SR20200

**PB FREE PRODUCT**

**SCHOTTKY BARRIER RECTIFIER**

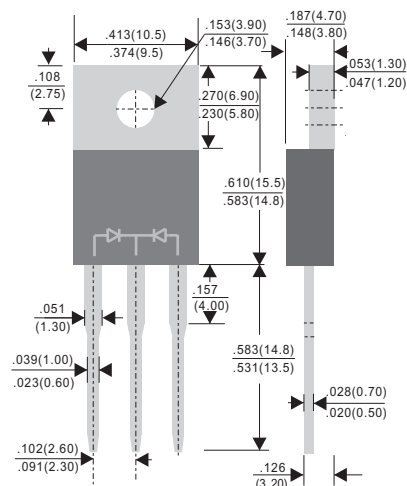
## FEATURES

- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge capability
- \* Pb free plating 99% Sn above



## MECHANICAL DATA

- \* Case: TO-220 Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 2.0 gram



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Single phase half wave, 60Hz, resistive or inductive load

For capacitive load, derate current by 20%

| RATINGS  |      | SYMBOL      | SR2020C | SR2030C | SR2040C | SR2060C | SR2080C     | SR20100C | SR20150C | SR20200C | UNIT  |       |
|--|------|-------------|---------|---------|---------|---------|-------------|----------|----------|----------|-------|-------|
| Marking Code   |      |             | SR2020C | SR2030C | SR2040C | SR2060C | SR2080C     | SR20100C | SR20150C | SR20200C |       |       |
| Maximum Recurrent Peak Reverse Voltage   | VRRM | 20          | 30      | 40      | 60      | 80      | 100         | 150      | 200      | Volts    |       |       |
| Maximum RMS Voltage  | VRMS | 14          | 21      | 28      | 42      | 56      | 70          | 105      | 140      | Volts    |       |       |
| Maximum DC Blocking Voltage  | VDC  | 20          | 30      | 40      | 60      | 80      | 100         | 150      | 200      | Volts    |       |       |
| Maximum Average Forward Rectified Current<br>0.375" (9.5mm) lead length at TL = 90°C                 | IO   | 20.0        |         |         |         |         |             |          |          |          | Amps  |       |
| Peak Forward Surge Current 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | IFSM | 200         |         |         |         |         |             |          |          |          | Amps  |       |
| Typical Thermal Resistance (Note 1)  | ROJA | 3.0         |         |         |         |         |             |          |          |          | °C/W  |       |
| Typical Junction Capacitance (Note 2)  | CJ   | 700         |         |         | 500     |         | 280         |          |          | PF       |       |       |
| Operating Temperature Range  | TJ   | -65 to +125 |         |         |         |         |             |          |          |          | °C    |       |
| Storage Temperature Range  | TSTG | -65 to +150 |         |         |         |         | -65 to +175 |          |          |          | °C    |       |
| CHARACTERISTICS  |      | SYMBOL      | SR2020C | SR2030C | SR2040C | SR2060C | SR2080C     | SR20100C | SR20150C | SR20200C | UNIT  |       |
| Maximum Forward Voltage at 10.0A DC, pre leg(Note 3)   | VF   |             | 0.55    |         |         | 0.75    | 0.85        |          | 0.92     |          | Volts |       |
| Maximum Average Reverse Current at   | IR   | @TA=25°C    | 0.5     |         |         |         |             |          |          |          |       | mAmps |
| Rated DC Blocking Voltage  |      | @TA=100°C   | 10      |         |         |         |             |          |          |          |       |       |

NOTES :1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

3. Measured at Pulse Width 300µs, Duty Cycle 2%.



**CHENG-YI  
ELECTRONIC**

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## TO-220 PACKAGE

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

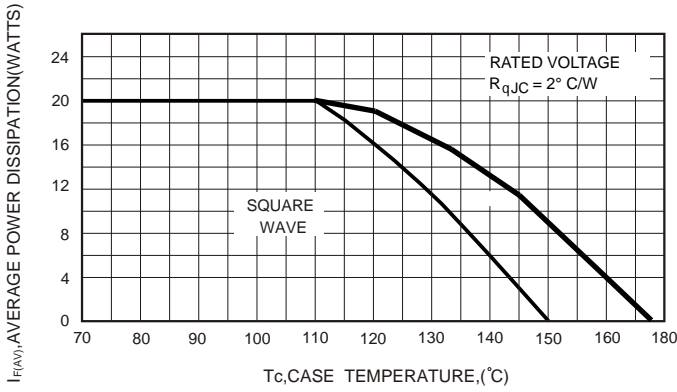


FIG.2- TYPICAL FORWARD VOLTAGE (PER LEG)

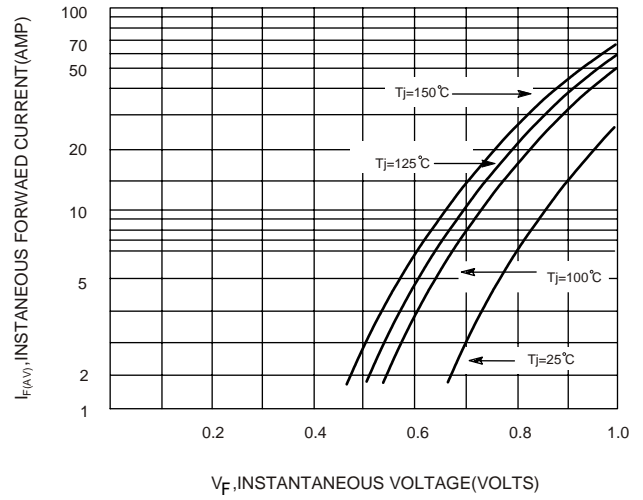


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

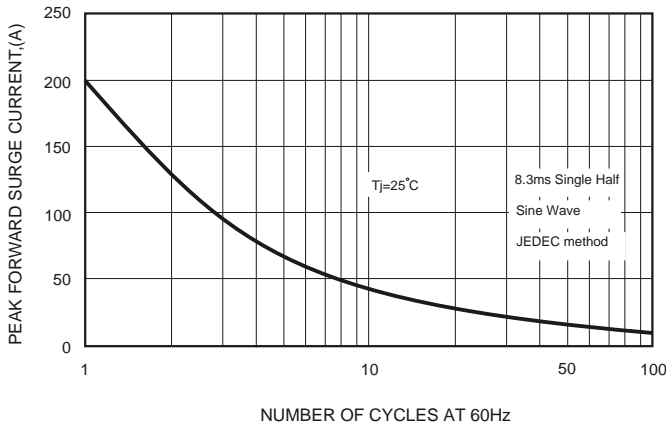


FIG.5-TYPICAL REVERSE CURRENT (PER LEG)

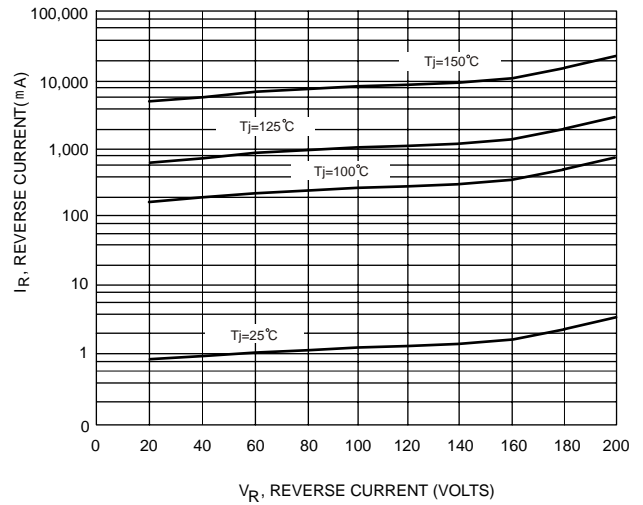


FIG.4-TYPICAL JUNCTION CAPACITANCE

