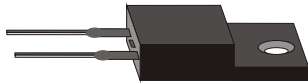


# SRF10150 THRU SRF10200



## 10.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

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

### MECHANICAL DATA

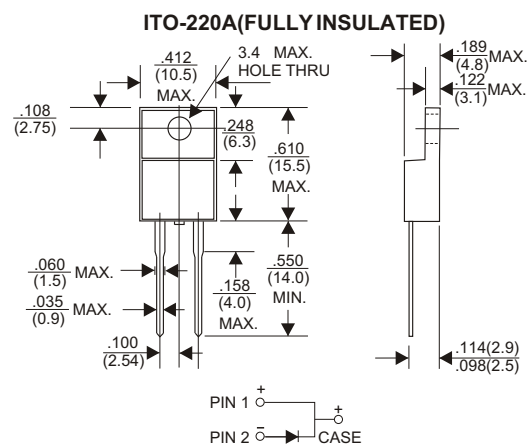
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

### VOLTAGE RANGE

150 to 200 Volts

### CURRENT

10.0 Amperes



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  | SRF10150 | SRF10200   | 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 T <sub>c</sub> =95°C  |          | 10.0       | 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   |          | 0.95       | V     |
| Maximum DC Reverse Current Ta=25°C   |          | 0.5        | mA    |
| at Rated DC Blocking Voltage Ta=100°C  |          | 50         | mA    |
| Typical Junction Capacitance (Note1)   |          | 500        | pF    |
| Typical Thermal Resistance R <sub>θJC</sub> (Note 2)   |          | 2.5        | °C/W  |
| Operating Temperature Range T <sub>j</sub>   |          | -65 — +150 | °C    |
| Storage Temperature Range T <sub>stg</sub>   |          | -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 (SRF10150 THRU SRF10200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

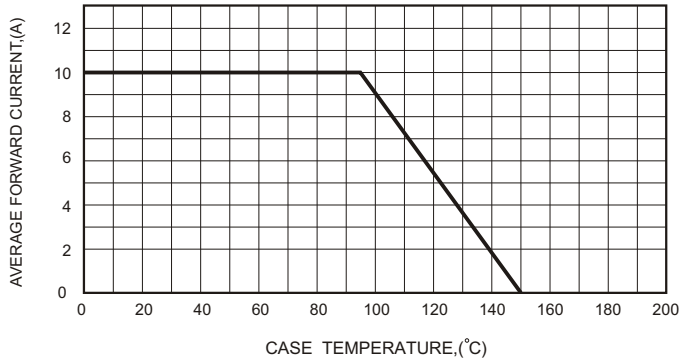


FIG.2-TYPICAL FORWARD CHARACTERISTICS

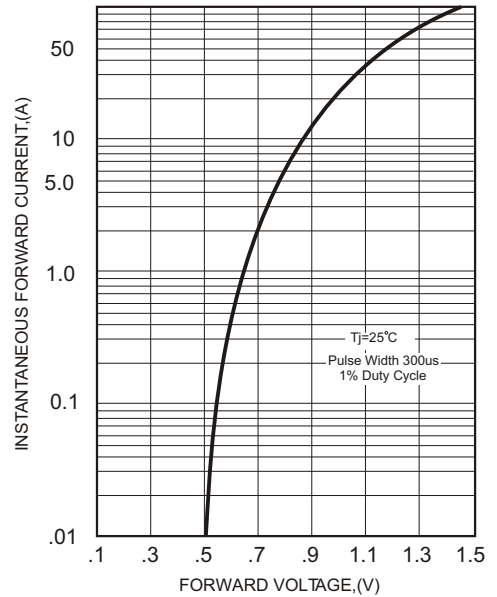


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

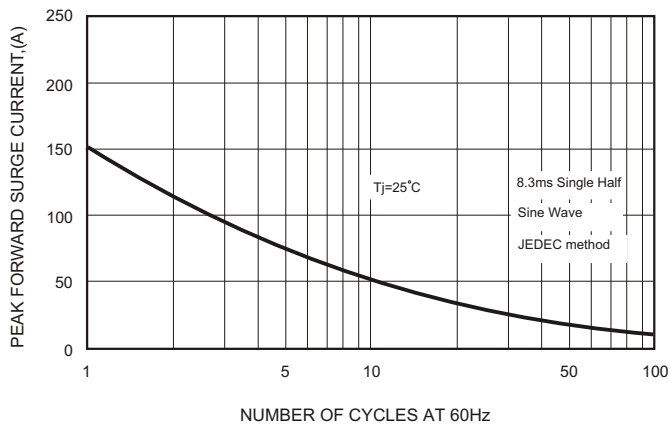


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

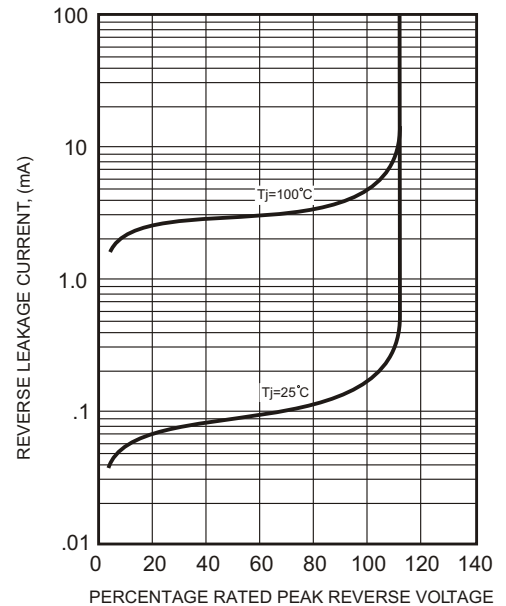


FIG.4-TYPICAL JUNCTION CAPACITANCE

