

# SRF2020LCT THRU SRF20100LCT

20.0 AMP SCHOTTKY BARRIER RECTIFIERS

GW



## FEATURES

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

## MECHANICAL DATA

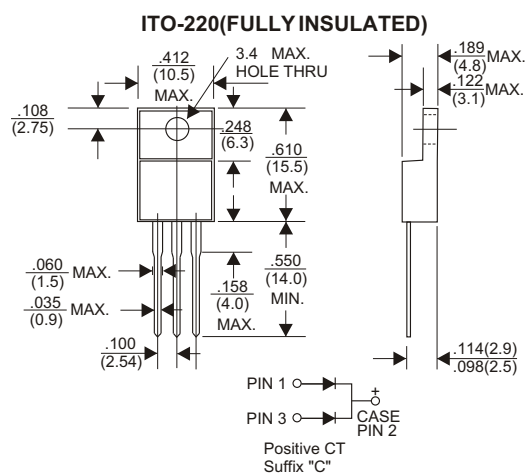
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

## VOLTAGE RANGE

20 to 100 Volts

## CURRENT

20.0 Amperes



## 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                                                                                        | SRF2020<br>LCT | SRF2030<br>LCT | SRF2040<br>LCT | SRF2050<br>LCT | SRF2060<br>LCT | SRF2080<br>LCT | SRF20100<br>LCT | UNITS |
|----------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 20             | 30             | 40             | 50             | 60             | 80             | 100             | V     |
| Maximum RMS Voltage                                                                                | 14             | 21             | 28             | 35             | 42             | 56             | 70              | V     |
| Maximum DC Blocking Voltage                                                                        | 20             | 30             | 40             | 50             | 60             | 80             | 100             | V     |
| Maximum Average Forward Rectified Current                                                          |                |                |                |                |                |                |                 |       |
| See Fig. 1                                                                                         | 20             |                |                |                |                |                |                 | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 200            |                |                |                |                |                |                 | A     |
| Maximum Instantaneous Forward Voltage per Leg at 10.0A                                             | 0.45           |                |                | 0.55           |                | 0.75           |                 | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 1              |                |                |                |                |                |                 | mA    |
| at Rated DC Blocking Voltage Ta=100°C                                                              | 50             |                |                |                |                |                |                 | mA    |
| Typical Thermal Resistance R JC (Note 1)                                                           | 2.0            |                |                |                |                |                |                 | °C/W  |
| Operating Temperature Range Tj                                                                     | -65 — +125     |                |                |                |                | -65 — +150     |                 | °C    |
| Storage Temperature Range Tstg                                                                     | -65 — +150     |                |                |                |                |                |                 | °C    |
|                                                                                                    |                |                |                |                |                |                |                 |       |

### NOTES:

1. Thermal Resistance Junction to Case.

## RATING AND CHARACTERISTIC CURVES (SRF2020LCT THRU SRF20100LCT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

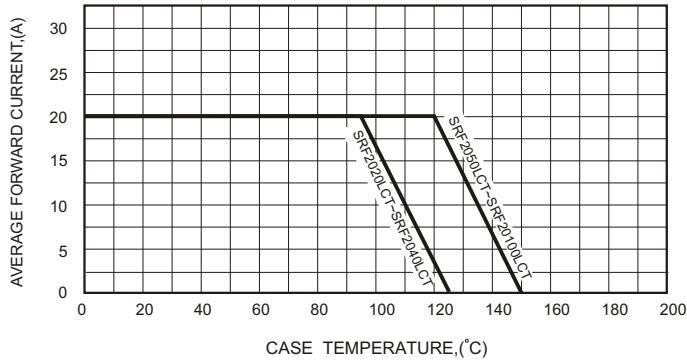


FIG.2-TYPICAL FORWARD CHARACTERISTICS

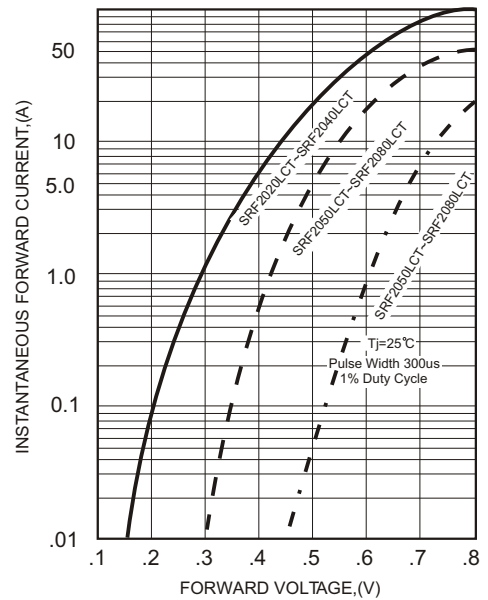


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

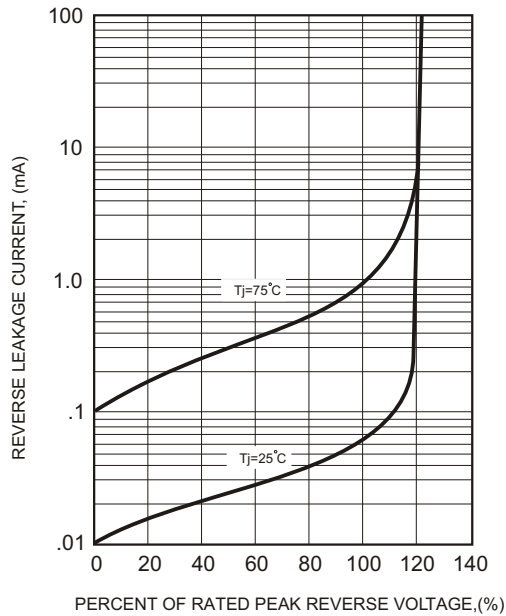


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

