

SRF1620CT THRU SRF1660CT

16.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Good for switching mode application

MECHANICAL DATA

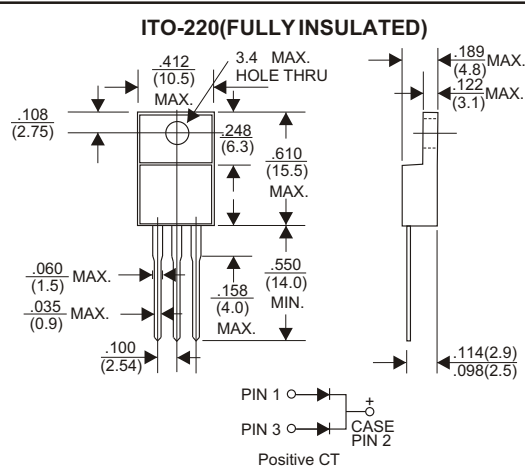
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 2.05 grams

VOLTAGE RANGE

20 to 60 Volts

CURRENT

16.0 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 | SRF1620 CT | SRF1630 CT | SRF1635 CT | SRF1640 CT | SRF1645 CT | SRF1650 CT | SRF1660 CT | UNITS |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Maximum Recurrent Peak Reverse Voltage | 20 | 30 | 35 | 40 | 45 | 50 | 60 | V |
| Maximum RMS Voltage | 14 | 21 | 24 | 28 | 31 | 35 | 42 | V |
| Maximum DC Blocking Voltage | 20 | 30 | 35 | 40 | 45 | 50 | 60 | V |
| Maximum Average Forward Rectified Current | 16 | | | | | | | A |
| See Fig. 1 | | | | | | | | |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 150 | | | | | | | A |
| Maximum Instantaneous Forward Voltage per Leg at 8.0A | 0.65 | | | 0.75 | | | V | |
| Maximum DC Reverse Current Ta=25°C | 10 | | | | | | | mA |
| at Rated DC Blocking Voltage Ta=100°C | 100 | | | | | | | mA |
| Typical Junction Capacitance (Note1) | 700 | | | 460 | | | pF | |
| Typical Thermal Resistance R _{JC} (Note 2) | 3.0 | | | | | | | °C/W |
| Operating Temperature Range T _J | -65 — +125 | | | -65 — +150 | | | °C | |
| Storage Temperature Range T _{STG} | -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 (SRF1620CT THRU SRF1660CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

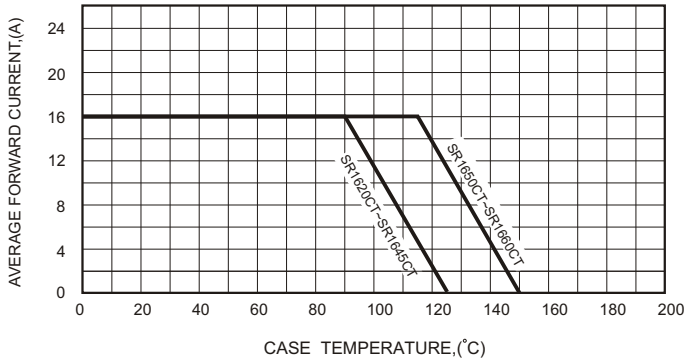


FIG.2-TYPICAL FORWARD CHARACTERISTICS

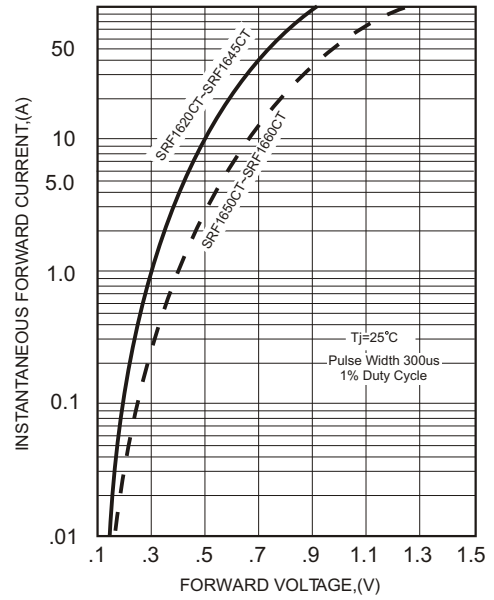


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

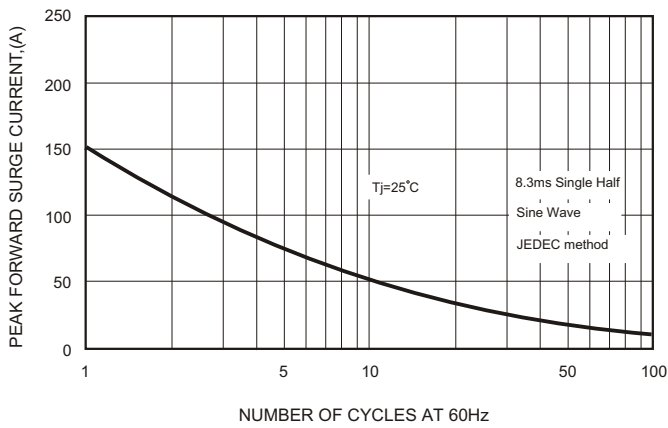


FIG.4-TYPICAL JUNCTION CAPACITANCE

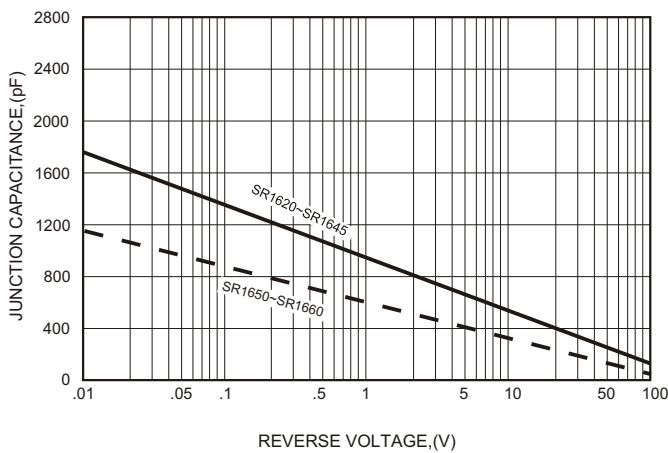


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

