

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

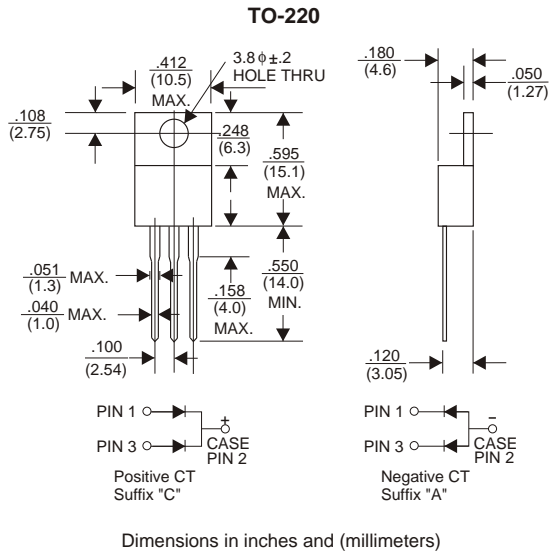


## FEATURES

- \* 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(Approximately)



## 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                                                                                        | SR16150    | UNITS |
|----------------------------------------------------------------------------------------------------|------------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 150        | V     |
| Working Peak Reverse Voltage                                                                       | 150        | V     |
| Maximum DC Blocking Voltage                                                                        | 150        | 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) | 180        | A     |
| Maximum Instantaneous Forward Voltage (I <sub>F</sub> = 8 Amps, T <sub>F</sub> = 25°C)             | 0.86       | V     |
| Maximum Instantaneous Forward Voltage (I <sub>F</sub> = 8 Amps, T <sub>F</sub> = 125°C)            | 0.72       | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 0.02       | mA    |
| at Rated DC Blocking Voltage Ta=125°C                                                              | 10         | mA    |
| Typical Junction Capacitance (Note 1)                                                              | 350        | pF    |
| Typical Thermal Resistance R <sub>θJA</sub> (Note 2)                                               | 2.0        | °C/W  |
| Operating Temperature Range T <sub>J</sub>                                                         | -50 ~ +150 | °C    |
| Storage Temperature Range T <sub>STG</sub>                                                         | -65 ~ +175 | °C    |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (SR16150)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

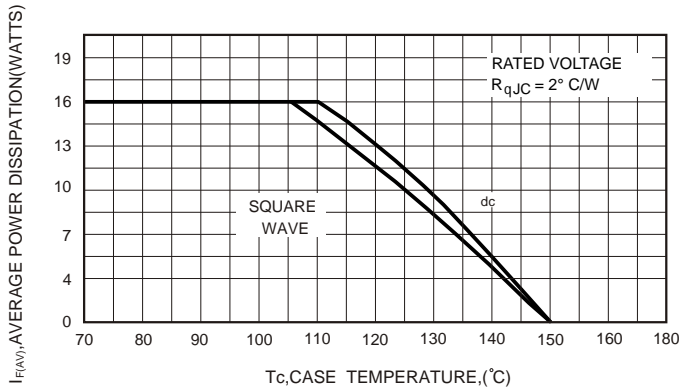


FIG.2- TYPICAL FORWARD VOLTAGE (PER LEG)

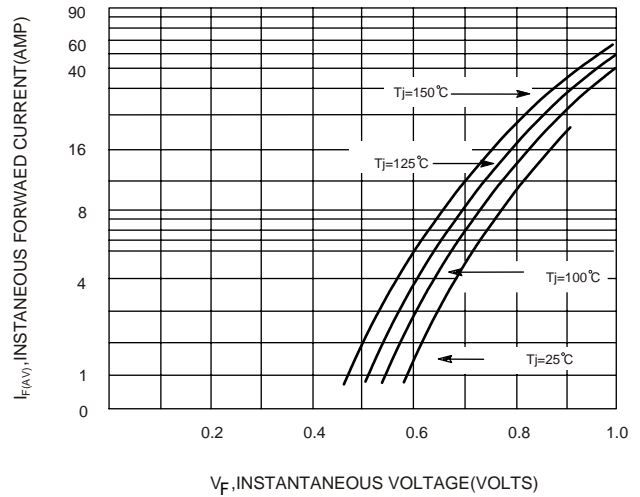


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

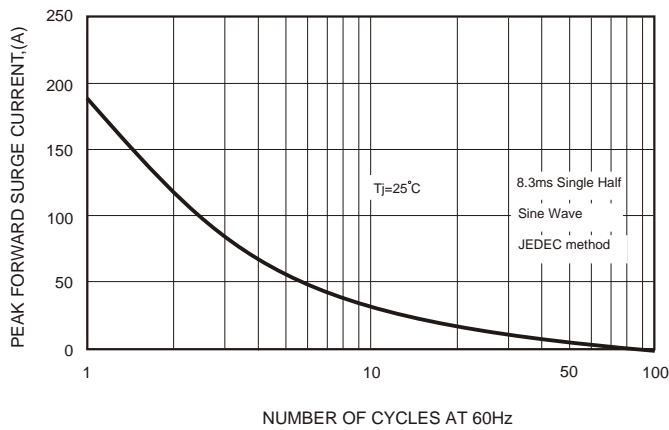


FIG.5-TYPICAL REVERSE CURRENT (PER LEG)

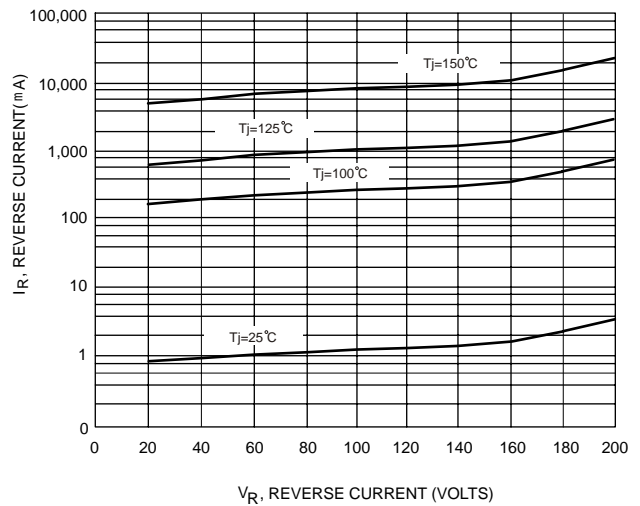


FIG.4-TYPICAL JUNCTION CAPACITANCE

