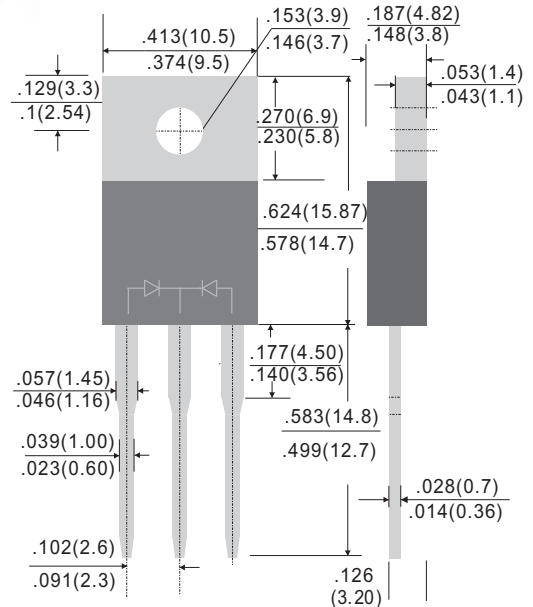


Mechanical Date

- Case:TO-220
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over copper Lead frame. Solderable per MIL-STD-202
- Weight: 1.948 grams (approximate)



TO-220



Dimensions in inches and (millimeters)

Features

- Guard Ring for over voltage Protection
- High forward surge capability
- High frequency operation
- Component in accordance to RoHS 2002/95/EC
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| PARAMETER | SYMBOL | SR16407 | SR16607 | SR161007 | SR161507 | SR16200C | UNIT |
|--|-----------------|--------------|--------------|--------------|--------------|----------|--------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | 60 | 100 | 150 | 200 | V |
| Maximum RMS voltage | V_{RMS} | 28 | 42 | 70 | 105 | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 40 | 60 | 100 | 150 | 200 | V |
| Maximum average forward rectified current(Total) (Per Leg) | I_F | 16 8 | | | | | A A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 125.0 | | | | | A |
| Maximum Instantaneous IF=8A @ 25°C Forward Voltage IF=8A @ 100°C | V_F | 0.55 0.52 | 0.70 0.60 | 0.85 0.70 | 0.92 0.80 | | V |
| Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C | I_R | 0.5 30 | | 0.2 10 | | | mA |
| Typical Junction Capacitance(NOTE1) | C_j | 450 | 350 | 250 | 200 | 150 | pF |
| Typical Thermal Resistance | $R_{\theta JC}$ | 3 | | | | | °C/W |
| Operating Temperature Range | T_J | -55 to +125 | | | -55 to +150 | | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | °C |

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

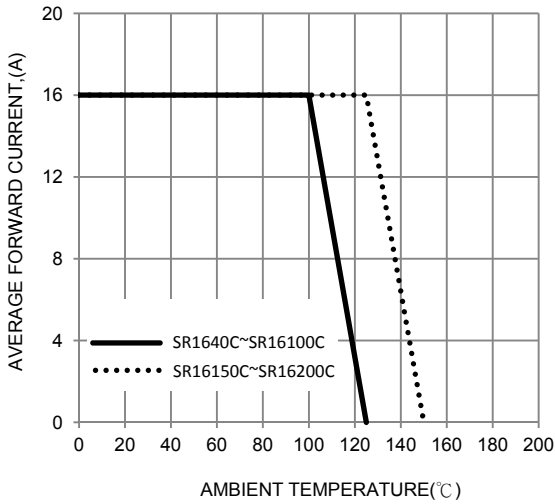


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

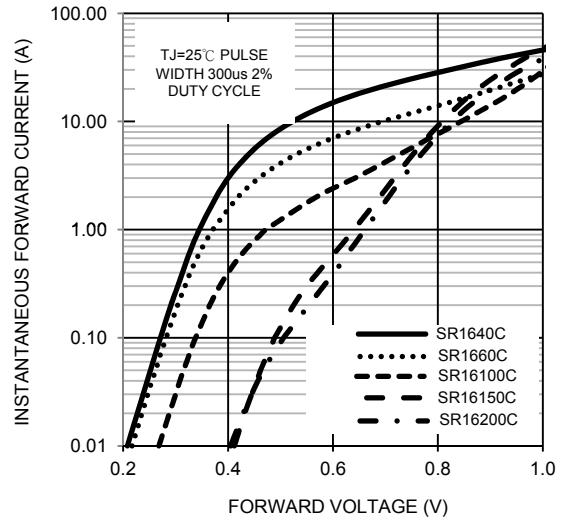


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

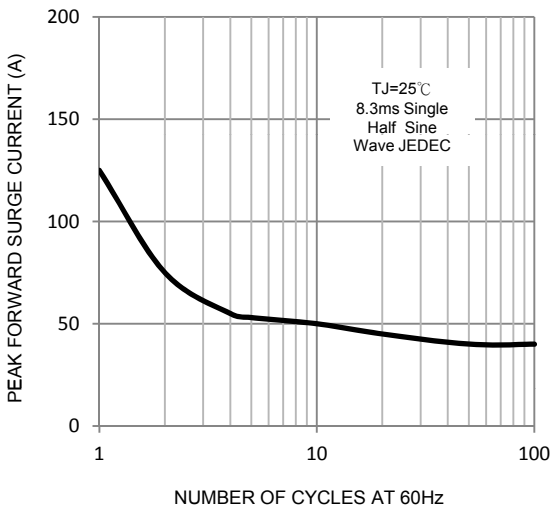


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

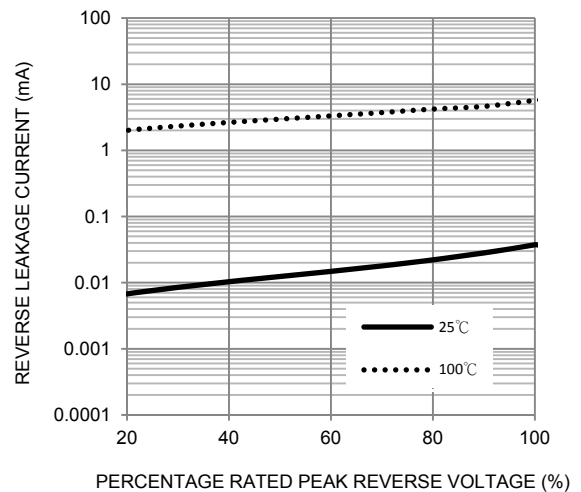


FIG. 5-TYPICAL JUNCTION CAPACITANCE

