



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: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.10 grams

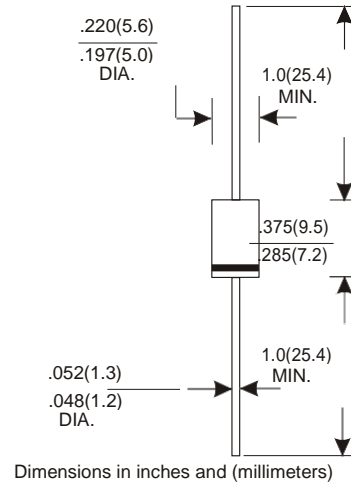
VOLTAGE RANGE

40 to 100 Volts

CURRENT

10.0 Amperes

DO-27



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 | SR1045L | SR1060L | SR10100L | UNITS |
|---|---------|-------------|----------|----------------|
| Maximum Recurrent Peak Reverse Voltage | 40 | 60 | 100 | V |
| Maximum RMS Voltage | 28 | 42 | 70 | V |
| Maximum DC Blocking Voltage | 40 | 60 | 100 | V |
| Maximum Average Forward Rectified Current See Fig. 1 | | 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 10.0A | 0.47 | 0.57 | 0.67 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | | 200 | | μ A |
| | | 20 | | mA |
| Typical Junction Capacitance (Note 1) | | 670 | | pF |
| Typical Thermal Resistance R _{JA} (Note 2) | | 20 | | $^{\circ}$ C/W |
| Operating Temperature Range T _J | | -55 to +150 | | $^{\circ}$ C |
| Storage Temperature Range T _{STG} | | -55 to +150 | | $^{\circ}$ C |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.375"(9.5mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR1045L THUR SR10100L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

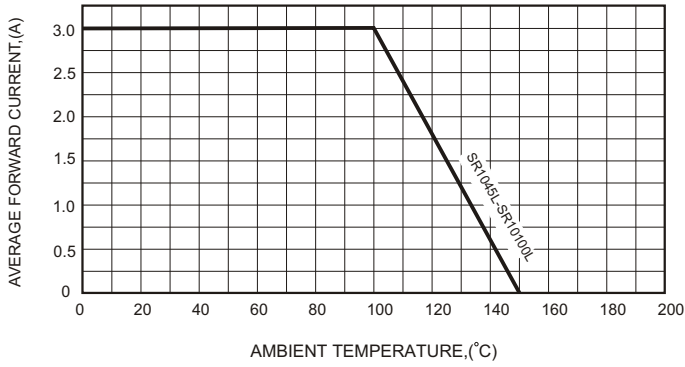


FIG.2-TYPICAL FORWARD CHARACTERISTICS

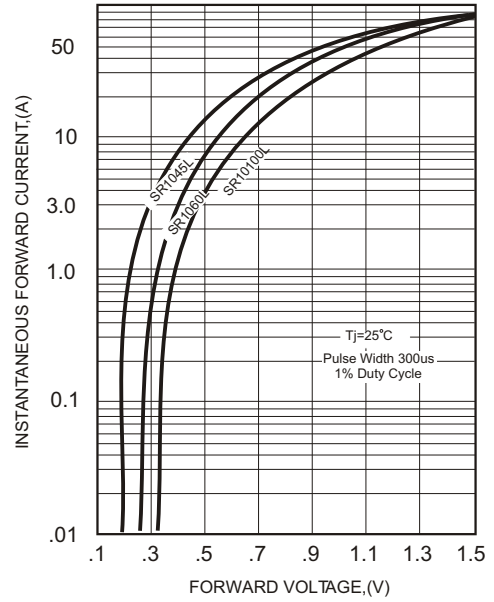


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

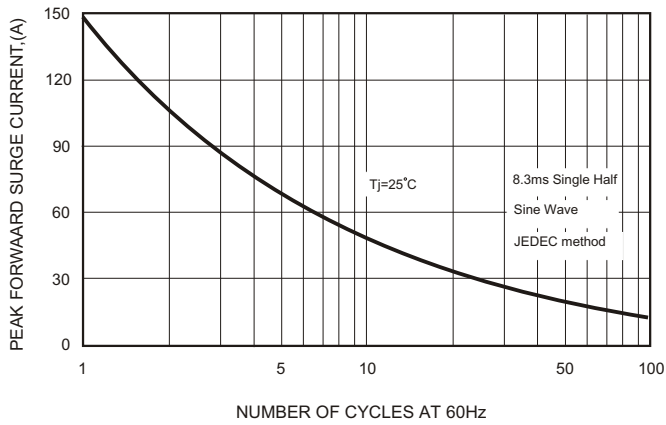


FIG.4-TYPICAL JUNCTION CAPACITANCE

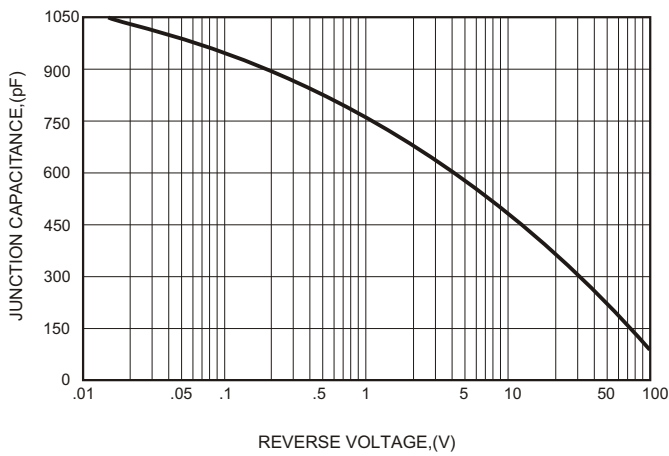


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

