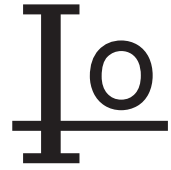


SR1045L

LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 45 Volts

Forward Current - 10.0Amperes



FEATURES

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

MECHANICAL DATA

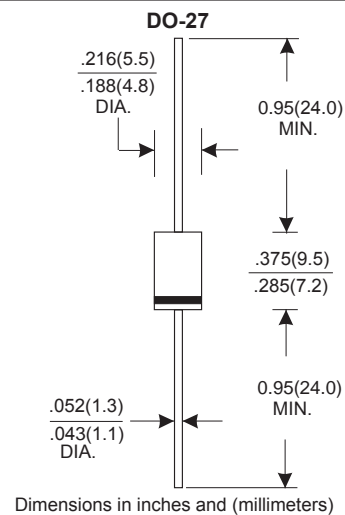
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.04 grams
- * Lead Free Finish/RoHS Compliant

VOLTAGE RANGE

45 Volts

CURRENT

10.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unieess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | SR1045L | UNITS |
|--|------------|-------|
| Maximum Recurrent Peak Reverse Voltage | 45 | V |
| Maximum RMS Voltage | 31 | V |
| Maximum DC Blocking Voltage | 45 | V |
| Maximum Average Forward Rectified Current | 10.0 | A |
| 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 | 0.45 | V |
| Maximum DC Reverse Current Ta=25°C | 500 | uA |
| at Rated DC Blocking Voltage Ta=100°C | 100 | mA |
| Typical Junction Capacitance (Note1) | 250 | pF |
| Typical Thermal Resistance RθJA (Note 2) | 20 | °C/W |
| Operating Temperature Range Tj | -65 — +150 | °C |
| Storage Temperature Range Tstg | -65 — +150 | °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 0.5" (12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR1045L)

FIG.1-FORWARD CURRENT DERATING CURVE

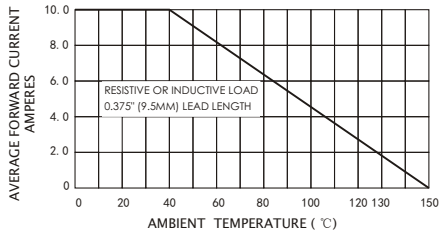


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

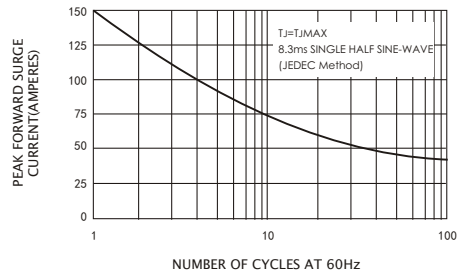


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

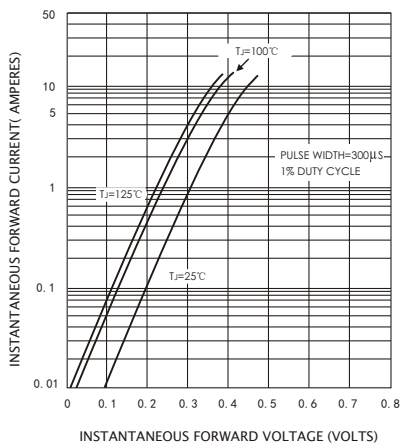


FIG.4-TYPICAL REVERSE CHARACTERISTICS

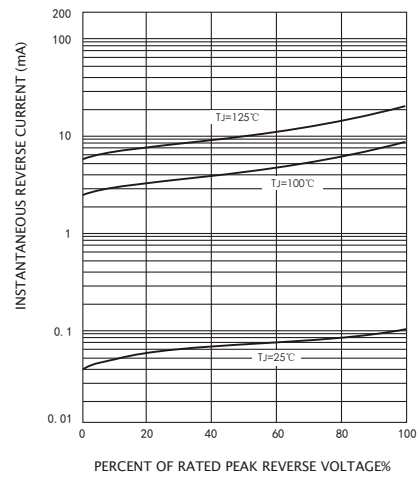


FIG.5-TYPICAL JUNCTION CAPACITANCE

