

SR1020D THRU SR1060D



10 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

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

MECHANICAL DATA

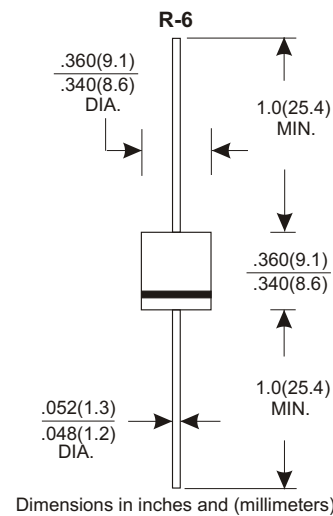
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any

VOLTAGE RANGE

20 to 60 Volts

CURRENT

10 Amperes



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 | SR1020D | SR1030D | SR1040D | SR1050D | SR1060D | UNITS |
|--|------------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | 20 | 30 | 40 | 50 | 60 | V |
| Maximum RMS Voltage | 14 | 21 | 28 | 35 | 42 | V |
| Maximum DC Blocking Voltage | 20 | 30 | 40 | 50 | 60 | V |
| Maximum Average Forward Rectified Current | | | | | | |
| At Ta=50°C | 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 10A | 0.62 | | 0.75 | | | V |
| Maximum DC Reverse Current Ta=25°C | 0.5 | | | | | mA |
| at Rated DC Blocking Voltage Ta=100°C | 50 | | | | | mA |
| Typical Junction Capacitance (Note 1) | 400 | | | | | pF |
| Typical Thermal Resistance RθJA (Note 2) | 9.0 | | | | | °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.

RATING AND CHARACTERISTIC CURVES (SR1020D THRU SR1060D)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

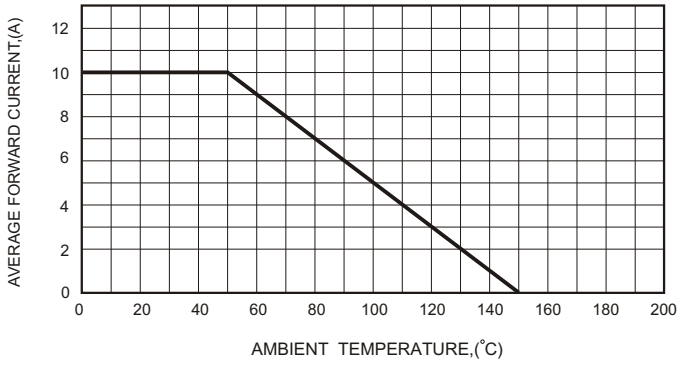


FIG.2-TYPICAL FORWARD CHARACTERISTICS

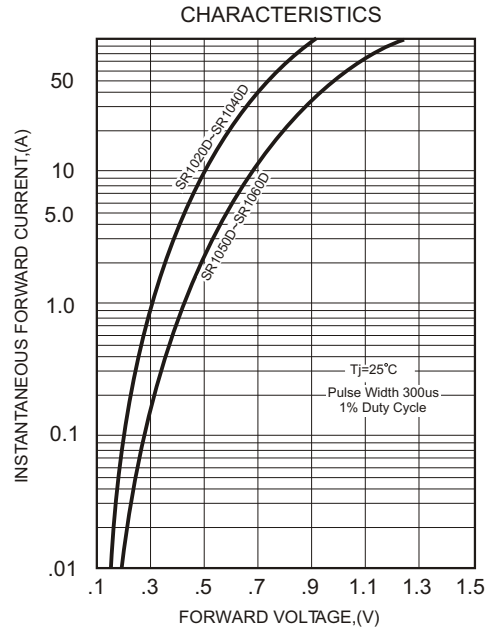


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

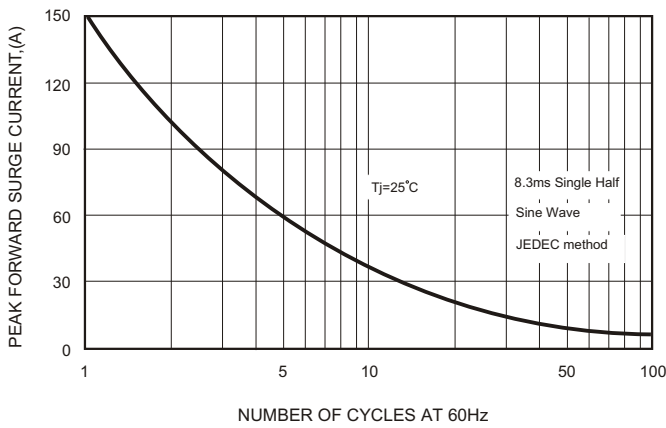


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

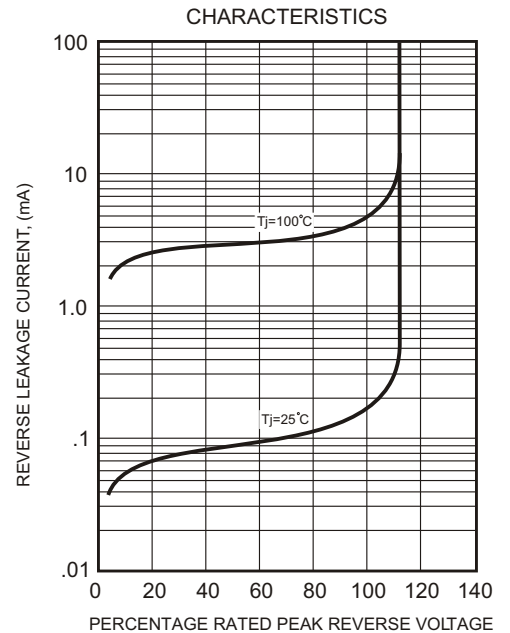


FIG.4-TYPICAL JUNCTION CAPACITANCE

