

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 Volts CURRENT 20 Amperes

FEATURES

- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

MECHANICAL DATA

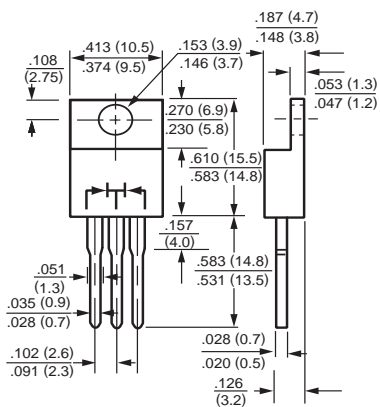
- * Case: To-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



TO-220



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

| RATINGS | SYMBOL | SR2020C | SR2030C | SR2035C | SR2040C | SR2045C | SR2050C | SR2060C | UNITS | |
|---|--------|--------------|---------|---------|---------|---------|---------|---------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts | |
| Maximum RMS Voltage | VRMS | 14 | 21 | 25 | 28 | 32 | 35 | 42 | Volts | |
| Maximum DC Blocking Voltage | VDC | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts | |
| Maximum Average Forward Rectified Current at Derating Case Temperature | IO | 20 | | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 150 | | | | | | | | Amps |
| Typical Thermal Resistance (Note 1) | RθJC | 3 | | | | | | | | °C/W |
| Typical Junction Capacitance (Note 3) | CJ | 700 | | | | 500 | | | | pF |
| Operating Temperature Range | TJ | -55 to + 150 | | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to + 150 | | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | SR2020C | SR2030C | SR2035C | SR2040C | SR2045C | SR2050C | SR2060C | UNITS | |
|--|--------|-------------|---------|---------|---------|---------|---------|---------|-------|-------|
| Maximum Instantaneous Forward Voltage at 10.0A DC | VF | .65 | | | | .75 | | | | Volts |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | IR | 10 | | | | 100 | | | | mAmps |
| | | @Tc = 25°C | | | | | | | | |
| | | @Tc = 100°C | | | | | | | | |

- NOTES : 1. Thermal Resistance Junction to Case.
 2. Suffix "A" = Common Anode.
 3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SR2020C THRU SR2060C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

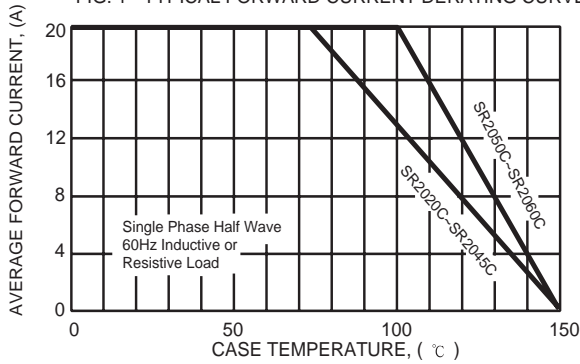


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

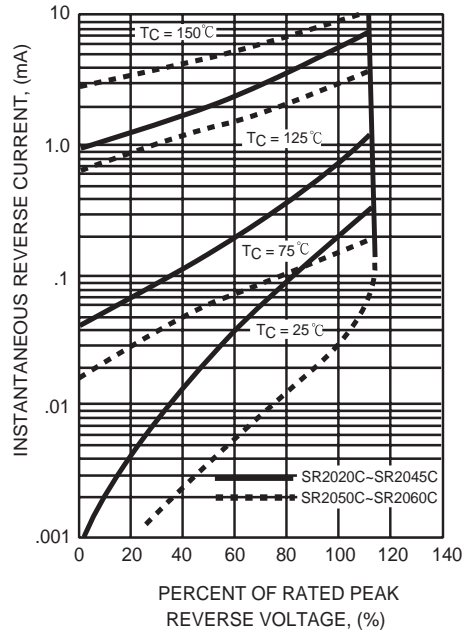


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

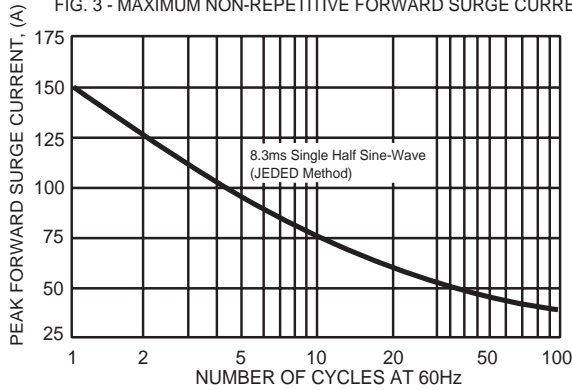


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

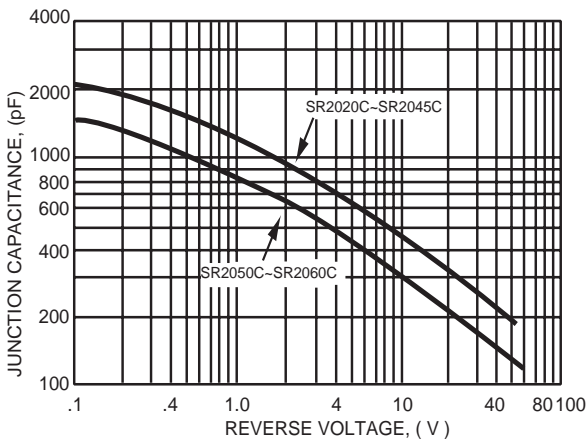


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

