

SR3020 THRU SR3060



30.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

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

MECHANICAL DATA

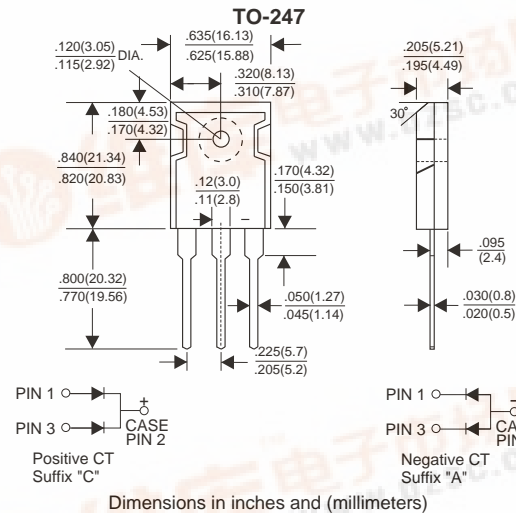
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 5.60 grams

VOLTAGE RANGE

20 to 60 Volts

CURRENT

30.0 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 | SR3020 | SR3030 | SR3035 | SR3040 | SR3045 | SR3050 | SR3060 | UNITS | |
|--|--------|--------|--------|--------|--------|------------|------------|------------|------|
| Maximum Recurrent Peak Reverse Voltage | 20 | 30 | 35 | 40 | 45 | 50 | 60 | V | |
| Maximum RMS Voltage | 14 | 21 | 24 | 28 | 31 | 35 | 42 | V | |
| Maximum DC Blocking Voltage | 20 | 30 | 35 | 40 | 45 | 50 | 60 | V | |
| Maximum Average Forward Rectified Current | | | | | | | | | |
| See Fig. 1 | | | | | | | | 30 | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | | | | | | | | 300 | A |
| Maximum Instantaneous Forward Voltage per Leg at 15.0A | | | | | | 0.65 | 0.75 | V | |
| Maximum DC Reverse Current Ta=25°C | | | | | | | | 10 | mA |
| at Rated DC Blocking Voltage Ta=100°C | | | | | | | | 100 | mA |
| Typical Thermal Resistance RqJC (Note 1) | | | | | | | | 1.4 | °C/W |
| Operating Temperature Range Tj | | | | | | -65 — +125 | -65 — +150 | °C | |
| Storage Temperature Range Tstg | | | | | | | | -65 — +150 | °C |

NOTES:

1. Thermal Resistance Junction to Case.



RATING AND CHARACTERISTIC CURVES (SR3020 THRU SR3060)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

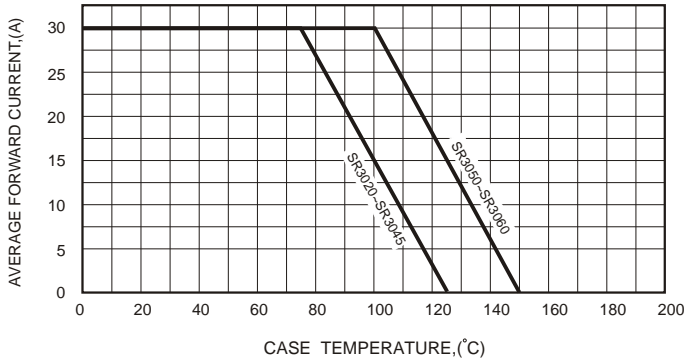


FIG.2-TYPICAL FORWARD CHARACTERISTICS

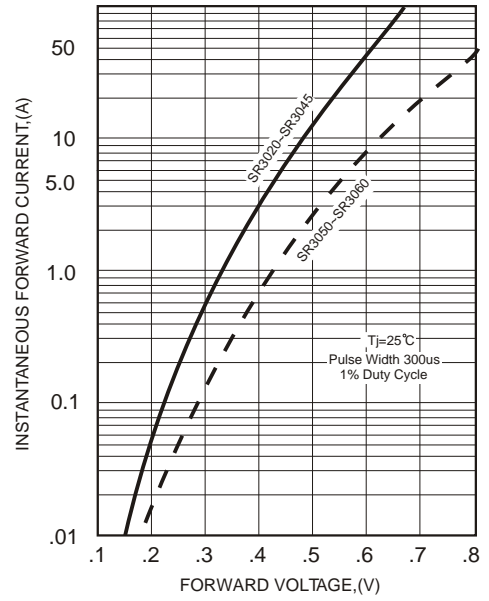


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

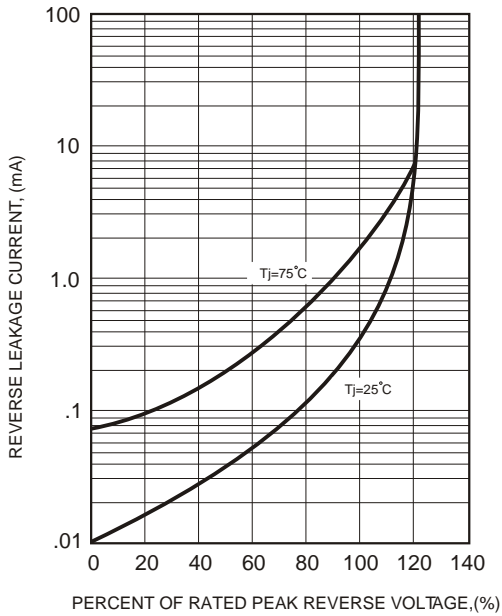


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

