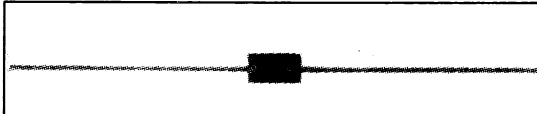




SR220 THRU SR2A0

2.0 AMPS. SCHOTTKY BARRIER RECTIFIERS



FEATURES

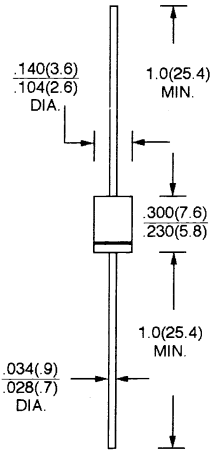
- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: DO-41 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
- * Weight: 0.39grams

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
2.0 Amperes

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%

| | Symbols | SR 220 | SR 230 | SR 240 | SR 250 | SR 260 | SR 280 | SR 2A0 | UNITS |
|---|---------------------|-------------|--------|--------|--------|--------|--------|-------------------|-------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V _{olts} |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 57 | 71 | V _{olts} |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V _{olts} |
| Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length of $T_L = 75^\circ C$ | $I_{(AV)}$ | 2.0 | | | | | | | A _{mps} |
| Peak Forward Surge Current 8.3 ms single half sine - wave superimposed on rated load (JEDEC method) | I_{FSM} | 50.0 | | | | | | | A _{mps} |
| Maximum Instantaneous Forward Voltage of 2.0A (Note 1) | V_F | 0.55 | | 0.70 | | 0.85 | | V _{olts} | |
| Maximum Instantaneous reverse Current of rated DC blocking voltage (Note 1) | $T_A = 25^\circ C$ | 1.0 | | | | | | | mA |
| | $T_A = 100^\circ C$ | 20 | | | | | | | |
| Typical junction capacitance (Note 3) | C_J | 170 | | | | | | | pF |
| Typical thermal resistance (Note 2) | $R_{\theta JA}$ | 35.0 | | | | | | | °C/W |
| Operating junction temperature range | T_J | -65 to +125 | | | | | | | °C |
| Storage temperature range | T_{STG} | -65 to +150 | | | | | | | °C |

NOTE: (1) Pulse test: 300 μs pulse width, 1% duty cycle
 (2) Thermal resistance from junction to ambient, P. C. B. mounted with 0.375" (9.5mm) lead length with 1.5 x 1.5" (38 x 38mm) copper pads
 (3) Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR220 THRU SR2A0)

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

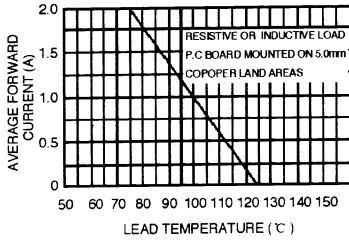


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

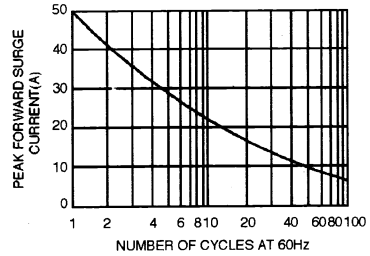


FIG. 3 – TYPICAL FORWARD CHARACTERISTICS

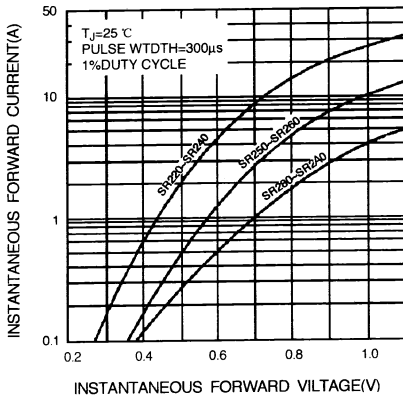


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

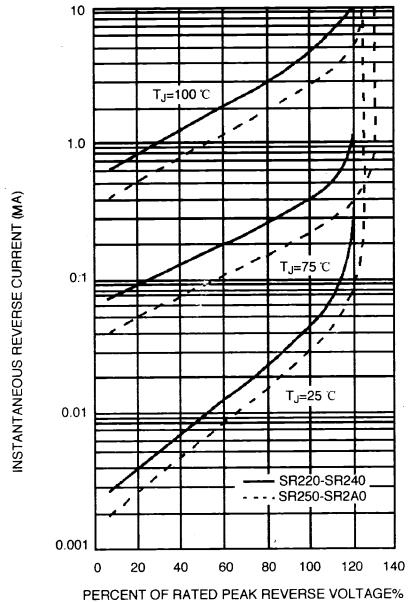


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

