



SR202 THRU SR204

2.0 AMPS. SCHOTTKY BARRIER RECTIFIERS

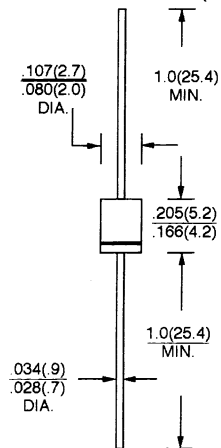
VOLTAGE RANGE

20 to 40 Volts

CURRENT

2.0 Amperes

DO-41



Dimensions in inches and (millimeters)

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: 0.33grams

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%

| TYPE NUMBER | SYMBOLS | SR202 | SR204 | UNITS |
|---|-----------------|---------------------------|-------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 40 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 28 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 40 | V |
| Maximum Average Forward Rectified Current See Fig. 1 | $I_{F(AV)}$ | 2.0 | | A |
| Peak Forward Surge Current. (8.3 ms, half sine) | I_{FSM} | 50 | | A |
| Maximum Instantaneous Forward Voltage @ 2.0A (Note 1) | V_F | 0.550 | | V |
| Maximum D. C Reverse Current @ $T_J = 25^\circ\text{C}$ at Rated D. C Blocking Voltage | I_R | 1.0 | | mA |
| Maximum Thermal Resistance (Note 2) | $R_{\theta JA}$ | 35 | | $^\circ\text{C}/\text{W}$ |
| Typical Junction Capacitance (Note 3) | C_J | 120 | | pF |
| Operating and Storage Temperature Range | T_J/T_{STG} | -65 to +125 / -65 to +150 | | $^\circ\text{C}$ |

NOTE: (1) Pulse test: $t_p = 300\mu\text{s}$, 1% duty cycle

(2) Thermal Resistance Junction to Ambient Vertical PC Board Mounting, .375" (9.5mm) Lead Length with $1.5 \times 1.5\text{cm}$ (38 x 38mm) copper pads.

(3) Measured at 1 MHz and applied reverse voltage of 4.0V D. C.

RATINGS AND CHARACTERISTIC CURVES (SR202 THRU SR204)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

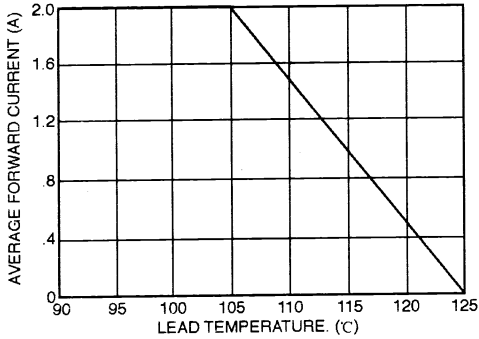


FIG. 2 - TYPICAL FORWARD CHARACTERISTICS

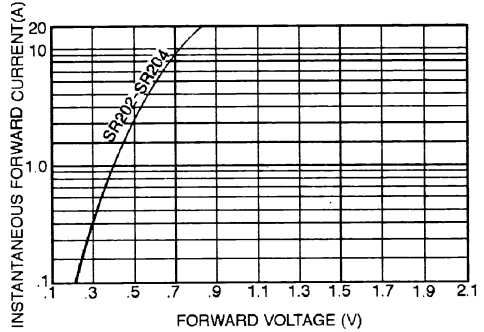


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

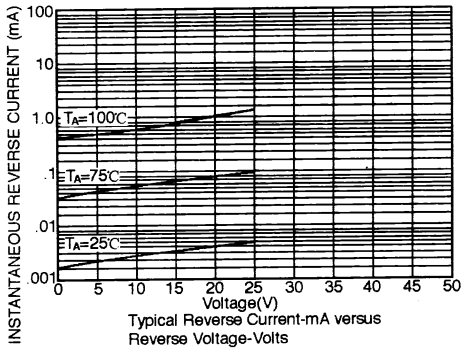


FIG. 4

MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

