



SCHOTTTKY BARRIER RECTIFIER

SR202 THRU SR210

VOLTAGE RANGE 20 to 100 Volts

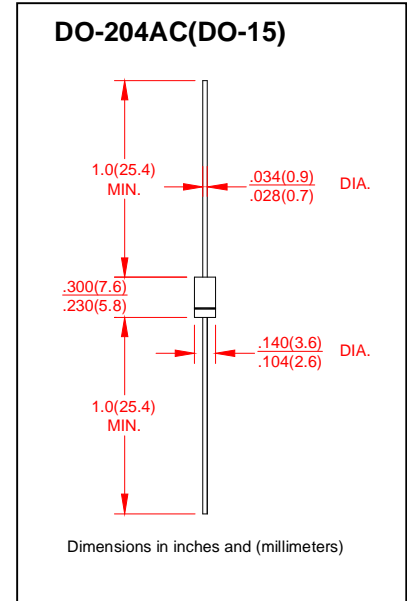
CURRENT 2.0 Ampere

FEATURES

- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High surge capability
- High temperature soldering guaranteed
250°C/10 seconds, 0.375" (9.5mm) lead length

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: solderable per MIL-STD-202E Method 208C
- Polarity :Color band denoted cathode end
- Mounting position: Any
- Weight: 0.014ounce, 0.39 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOLS | SR202 | SR203 | SR204 | SR205 | SR206 | SR208 | SR210 | UNIT |
|--|-----------------|---------------------|-------|-------|-------|-------|-------|-------|--------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | Volts |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | Volts |
| Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length ,(NOTE 1) $T_L = 100^\circ C$ | $I_{(AV)}$ | 2.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 60 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage @2.0A | V_F | 0.55 | | 0.70 | | 0.85 | | Volts | |
| Maximum DC Reverse Current at rated DC blocking voltage per element (Note1) | I_R | $T_A = 25^\circ C$ | | | | | | | μA |
| | | $T_A = 100^\circ C$ | | | | | | | |
| Typical Junction Capacitance (NOTE 3) | C_J | 200 | | | | | | | pF |
| Typical Thermal Resistance (NOTE 2) | $R_{\theta JA}$ | 20 | | | | | | | $^\circ C/W$ |
| Operating Junction Temperature Range | T_J | (-55 to +150) | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | (-55 to +150) | | | | | | | $^\circ C$ |

Notes:

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" \times 1.5" (38 \times 38mm) copper pads
3. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.



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RATING AND CHARACTERISTIC CURVES SR202 THRU SR210

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

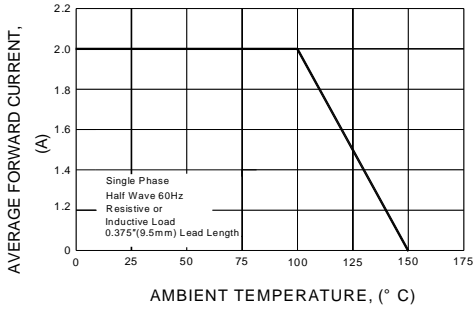


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

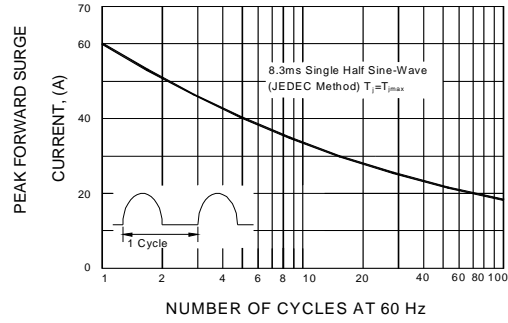


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

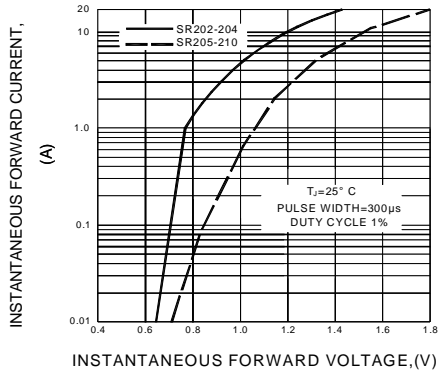


FIG.4-TYPICAL REVERSE CHARACTERISTICS

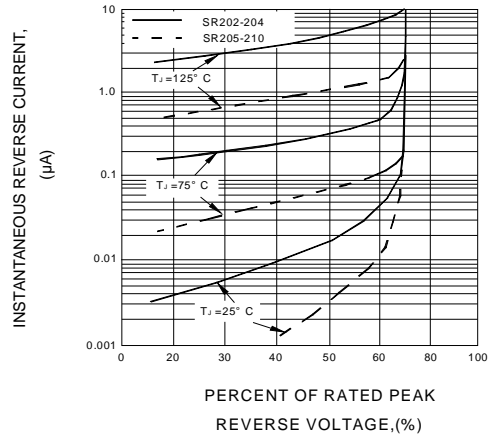


FIG.5-TYPICAL JUNCTION CAPACITANCE

