



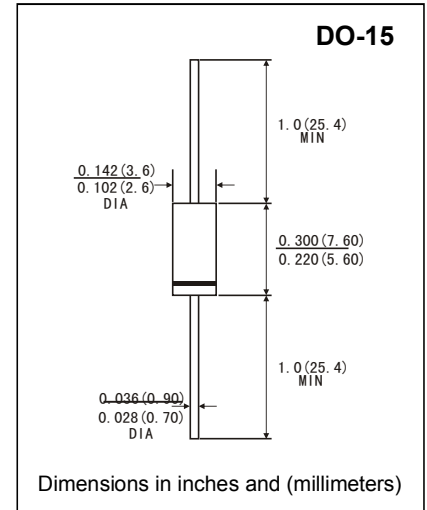
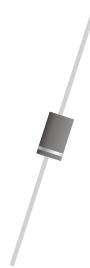
## SCHOTTKY BARRIER RECTIFIER

**SR220 - SR2200**

**VOLTAGE RANGE - 20 to 200 V**  
**CURRENT - 2 A**

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- High temperature soldering guaranteed:260 °C/10 seconds, at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



### MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014ounce, 0.39 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

|  | Symbols             | SR 220      | SR 230 | SR 240 | SR 250 | SR 260 | SR 280 | SR 2100 | SR 2150 | SR 2200 | Units |
|--|---------------------|-------------|--------|--------|--------|--------|--------|---------|---------|---------|-------|
| Maximum repetitive peak reverse voltage  | $V_{RRM}$           | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 150     | 200     | Volts |
| Maximum RMS voltage  | $V_{RMS}$           | 14          | 21     | 28     | 35     | 42     | 57     | 71      | 105     | 140     | Volts |
| Maximum DC blocking voltage  | $V_{DC}$            | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 150     | 200     | Volts |
| Maximum average forward rectified current<br>0.375"(9.5 mm)lead length at TL=100 °C                  | $I_{(AV)}$          | 2.0         |        |        |        |        |        |         |         |         | Amps  |
| Peak forward surge current 8.3ms single<br>half sine-wave superimposed on rated load<br>JEDEC method | $I_{FSM}$           | 50.0        |        |        |        |        |        |         |         |         | Amps  |
| Maximum Instantaneous Forward<br>Voltage at 2.0 A(Note 1)  | $V_F$               | 0.55        |        |        | 0.70   | 0.85   | 0.90   | 0.95    |         |         | Volts |
| Maximum instantaneous<br>reverse current at rated DC<br>blocking voltage(Note 1)                     | $T_a=25\text{ °C}$  | 0.2         |        |        |        | 0.4    |        |         |         | mA      |       |
|  | $T_a=125\text{ °C}$ | 10          |        |        |        |        |        |         |         |         |       |
| Typical thermal resistance (Note 3)  | $R_{\theta JC}$     | 35          |        |        |        |        |        |         |         |         | °C/W  |
| Operating junction and storage<br>temperature range  | $T_J/$<br>$T_{STG}$ | -55 to +150 |        |        |        |        |        |         |         |         | °C    |

#### Notes:

1. Pulse test: 300  $\mu$ s pulse width 1% duty cycle
2. Thermal resistance from junction to lead and /or to ambient P.C.B. mounted with 0.375"(9.5 mm)lead length with 1.5 x 1.5" (38 x 38 mm) copper pads.
3. Measured at 1.0 MHz and reverse voltage of 4.0 Volts.



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## RATINGS AND CHARACTERISTIC CURVES SR220 - SR2200

FIG.1-FORWARD CURRENT DERATING CURVE

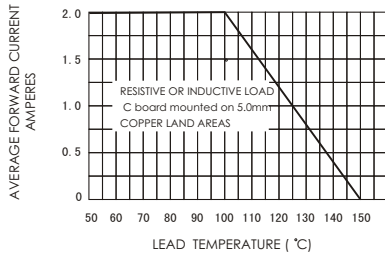


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

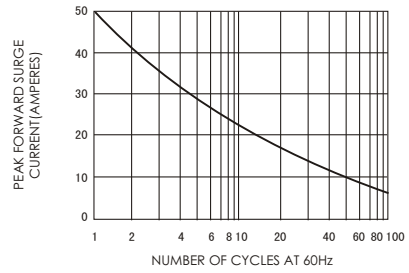


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

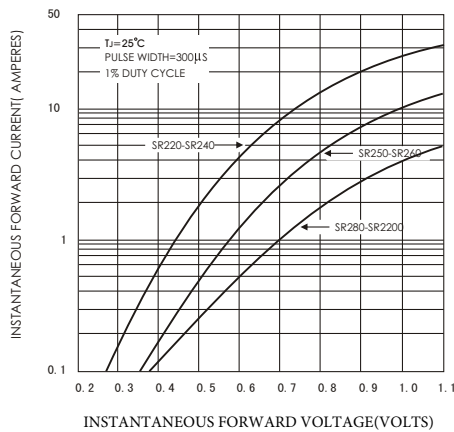


FIG.4-TYPICAL REVERSE CHARACTERISTICS

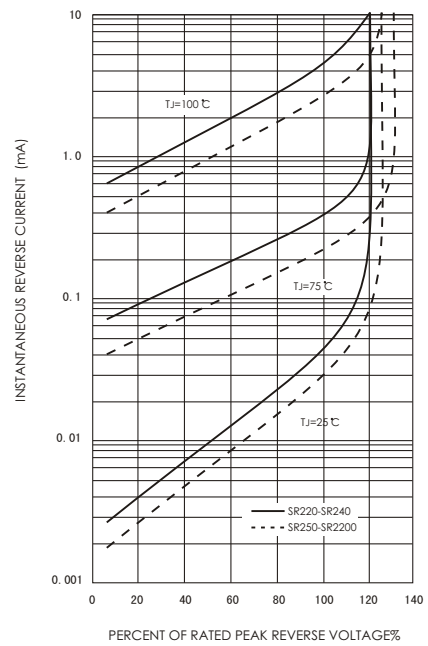


FIG.5-TYPICAL JUNCTION CAPACITANCE

