

# SR520 THRU SR5200

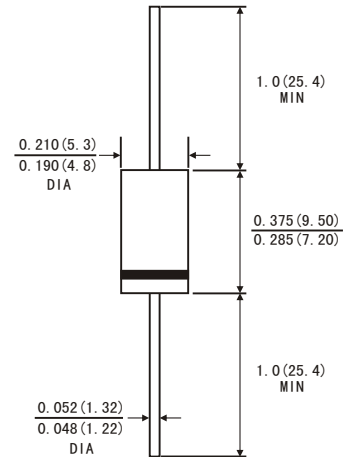
## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts  
 Forward Current - 5.0Amperes

### 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

### DO-201AD



### MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041ounce, 1.15 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Dimensions in inches and (millimeters)

(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 520      | SR 530 | SR 540 | SR 550 | SR 560      | SR 580 | SR 5100 | SR 5150 | SR 5200 | Units |
|---|------------------|-------------|--------|--------|--------|-------------|--------|---------|---------|---------|-------|
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub> | 20          | 30     | 40     | 50     | 60          | 80     | 100     | 150     | 200     | Volts |
| Maximum RMS voltage   | V <sub>RMS</sub> | 14          | 21     | 28     | 35     | 42          | 57     | 71      | 105     | 140     | Volts |
| Maximum DC blocking voltage   | V <sub>DC</sub>  | 20          | 30     | 40     | 50     | 60          | 80     | 100     | 150     | 200     | Volts |
| Maximum average forward rectified current<br>0.375"(9.5mm) lead length(see fig.1)   | I(AV)            | 5.0         |        |        |        |             |        |         |         |         | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T <sub>j</sub> ) | I <sub>FSM</sub> | 150.0       |        |        |        |             |        |         |         |         | Amps  |
| Maximum instantaneous forward voltage at 5.0 A(Note 1)  | V <sub>F</sub>   | 0.55        |        | 0.70   |        |             | 0.85   |         | 0.90    | 0.95    | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)  | I <sub>R</sub>   | 0.5         |        |        |        |             |        |         |         |         | mA    |
|   |                  | 50          |        |        | 25     |             |        |         |         |         |       |
| Typical junction capacitance(Note 3)  | C <sub>J</sub>   | 500         |        |        | 400    |             |        |         |         |         | pF    |
| Typical thermal resistance (Note 2)   | R <sub>θJA</sub> | 25.0        |        |        |        |             |        |         |         |         | °C/W  |
|   | R <sub>θJL</sub> | 8.0         |        |        |        |             |        |         |         |         |       |
| Operating junction temperature range  | T <sub>J</sub>   | -65 to +125 |        |        |        | -65 to +150 |        |         |         |         | °C    |
| Storage temperature range   | T <sub>STG</sub> | -65 to +150 |        |        |        |             |        |         |         |         | °C    |

Notes: 1.Pulse test: 300µs pulse width,1% duty cycle

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

3.Measured at 1MHz and reverse voltage of 4.0 volts