



PINGWEI ENTERPRISE

## SR120/SB120 THRU SR1200/SB1200

### 1.0AMP. SCHOTTKY BARRIER RECTIFIERS

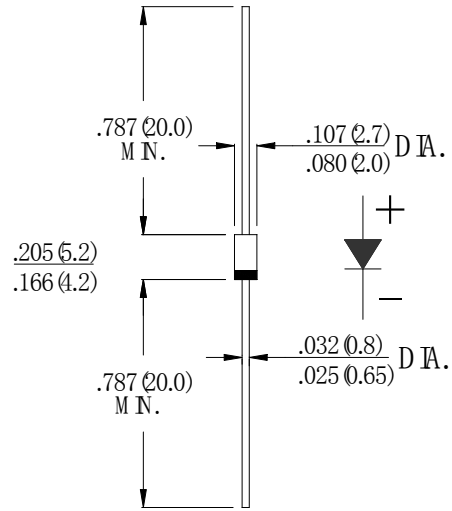
#### FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed  
260°C /10sec/ 0.375" lead length at 5 lbs tension

#### MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any

#### DO-41



Dimensions in inches and (millimeters)

### 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%

| Type Number   | SYMBOL      | SR          | SR   | SR   | SR          | SR  | SR  | SR   | SR   | SR   | SR   | unit |
|---|-------------|-------------|------|------|-------------|-----|-----|------|------|------|------|------|
|   |             | 120         | 130  | 140  | 150         | 160 | 180 | 190  | 1100 | 1150 | 1200 |      |
|   |             | SB          | SB   | SB   | SB          | SB  | SB  | SB   | SB   | SB   | SB   | s    |
|   |             | 120         | 130  | 140  | 150         | 160 | 180 | 190  | 1100 | 1150 | 1200 |      |
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$   | 20          | 30   | 40   | 50          | 60  | 80  | 90   | 100  | 150  | 200  | V    |
| Maximum RMS Voltage   | $V_{RMS}$   | 14          | 21   | 28   | 35          | 42  | 56  | 63   | 70   | 105  | 140  | V    |
| Maximum DC blocking Voltage   | $V_{DC}$    | 20          | 30   | 40   | 50          | 60  | 80  | 90   | 100  | 150  | 200  | V    |
| Maximum Average Forward Rectified Current<br>.375"(9.5mm) lead length at $T_L = 90^\circ\text{C}$                 | $I_{F(AV)}$ | 1.0         |      |      |             |     |     |      |      |      |      | A    |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)                  | $I_{FSM}$   | 30.0        |      |      |             |     |     |      |      |      |      | A    |
| Maximum Forward Voltage at 1.0A DC  | $V_F$       | 0.45        | 0.55 | 0.70 | 0.85        |     |     | 0.95 |      |      |      | V    |
| Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$ | $I_R$       | 0.5         |      |      | 40.0        |     |     | 0.1  |      | 10.0 |      | mA   |
| Typical Junction Capacitance (Note 1)   | $C_J$       | 110         |      |      | 28          |     |     |      |      |      |      | pF   |
| Typical Thermal Resistance (Note 2)   | $R_{(JA)}$  | 75          |      |      |             |     |     |      |      |      |      | °C/W |
| Storage Temperature   | $T_{STG}$   | -55 to +150 |      |      |             |     |     |      |      |      |      | °C   |
| Operation Junction Temperature  | $T_J$       | -55 to +125 |      |      | -55 to +150 |     |     |      |      |      |      | °C   |

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.