

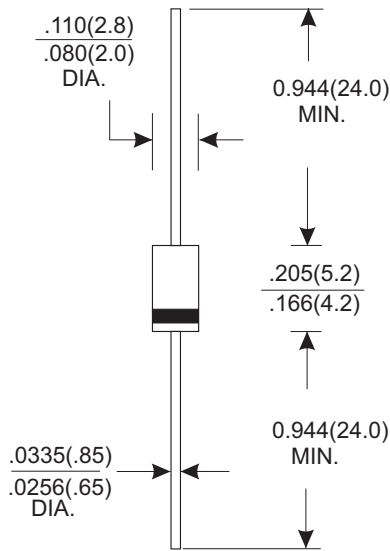


# SR120 THER SR1200

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 Ampere

### DO-41



Dimensions in inches and (millimeters)

### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

### MECHANICAL DATA

- \* Case: 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
- \* Mounting position: Any
- \* Weight: 0.29 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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  | SR120      | SR130 | SR140 | SR150 | SR160 | SR180 | SR1100 | SR1150 | SR1200 | UNITS |
|--|------------|-------|-------|-------|-------|-------|--------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage   | 20         | 30    | 40    | 50    | 60    | 80    | 100    | 150    | 200    | V     |
| Maximum RMS Voltage  | 14         | 21    | 28    | 35    | 42    | 56    | 70     | 105    | 140    | V     |
| Maximum DC Blocking Voltage  | 20         | 30    | 40    | 50    | 60    | 80    | 100    | 150    | 200    | V     |
| Maximum Average Forward Rectified Current  | 1.0        |       |       |       |       |       |        |        |        | A     |
| See Fig. 1   |            |       |       |       |       |       |        |        |        |       |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 30         |       |       |       |       |       |        |        |        | A     |
| Maximum Instantaneous Forward Voltage at 1.0A  | 0.55       |       | 0.70  |       | 0.85  |       | 0.92   |        |        | V     |
| Maximum DC Reverse Current Ta=25°C   | 0.05       |       |       |       |       |       |        |        |        | mA    |
| at Rated DC Blocking Voltage Ta=100°C  | 10         |       |       |       |       |       |        |        |        | mA    |
| Typical Junction Capacitance (Note 1)  | 110        |       |       |       |       |       |        |        |        | pF    |
| Typical Thermal Resistance RθJA (Note 2)   | 15         |       |       |       |       |       |        |        |        | °C/W  |
| Operating Temperature Range Tj   | -65 — +150 |       |       |       |       |       |        |        |        | °C    |
| Storage Temperature Range Tstg   | -65 — +150 |       |       |       |       |       |        |        |        | °C    |

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

# RATING AND CHARACTERISTIC CURVES (SR120 THRU SR1200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

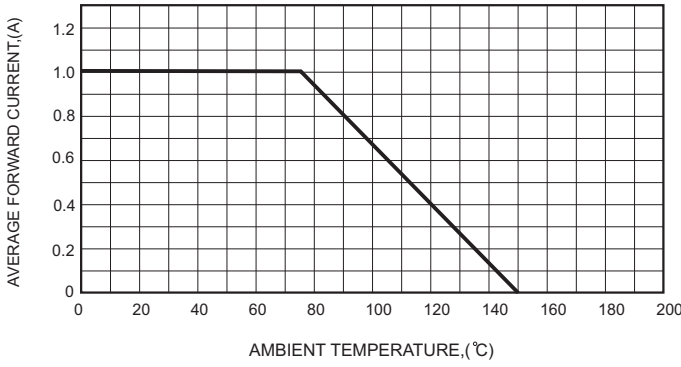


FIG.2-TYPICAL FORWARD CHARACTERISTICS

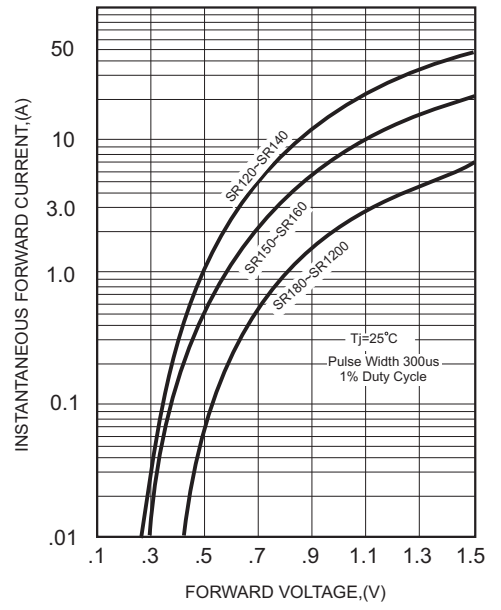


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

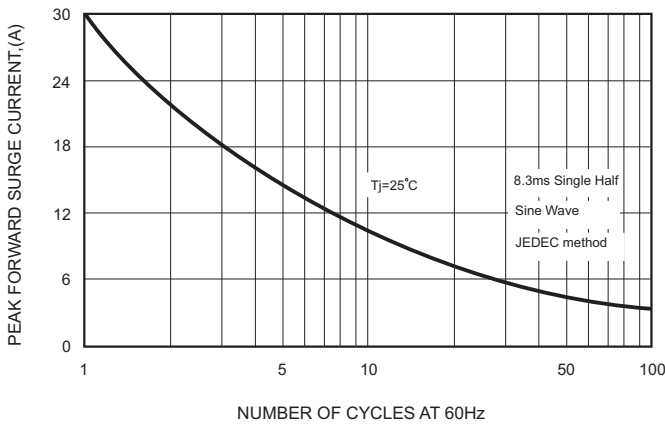


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

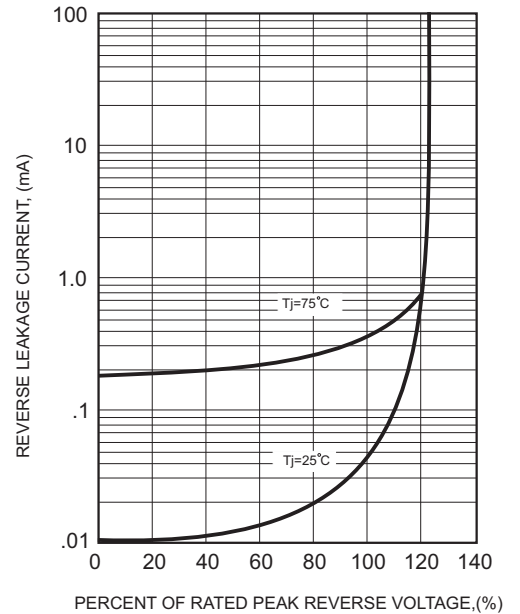


FIG.4-TYPICAL JUNCTION CAPACITANCE

