

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 90 to 100 Volts CURRENT 1.0 Ampere**

**FEATURES**

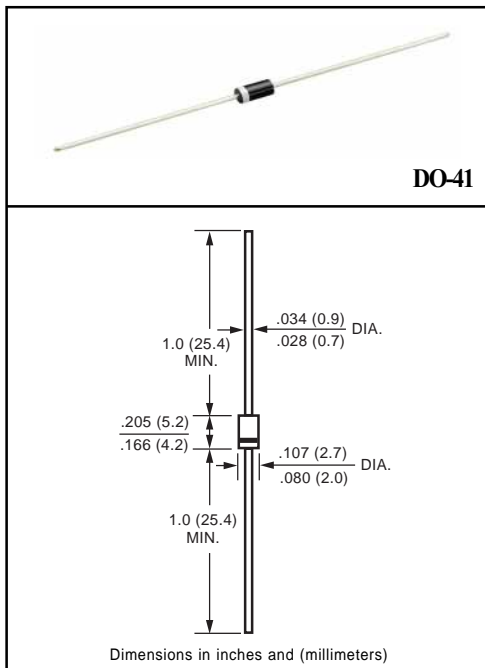
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.33 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

| RATINGS  | SYMBOL | SR190        | SR1100 | UNITS |
|--|--------|--------------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM   | 90           | 100    | Volts |
| Maximum RMS Voltage  | VRMS   | 63           | 70     | Volts |
| Maximum DC Blocking Voltage  | VDC    | 90           | 100    | Volts |
| Maximum Average Forward Rectified Current<br>.375" (9.5mm) lead length at Ta=50 °C                   | IO     | 1.0          |        | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | IFSM   | 50           |        | Amps  |
| Typical Thermal Resistance (Note 1)  | R θJA  | 57           |        | °C/W  |
| Typical Junction Capacitance (Note 2)  | CJ     | 110          |        | pF    |
| Operating Temperature Range  | TJ     | 150          |        | °C    |
| Storage Temperature Range  | TSTG   | -55 to + 150 |        | °C    |

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS                                  | SYMBOL | SR190 | SR1100 | UNITS |
|--|--------|-------|--------|-------|
| Maximum Instantaneous Forward Voltage at 1.0A DC | VF     | .77   |        | Volts |
| Maximum Average Reverse Current<br>@ TA = 25°C   | IR     | 1.0   |        | uA    |
| at Rated DC Blocking Voltage<br>@ TJ = 125°C     |        | 0.5   |        | mA    |

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

# RATING AND CHARACTERISTIC CURVES ( SR190 THRU SR1100 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

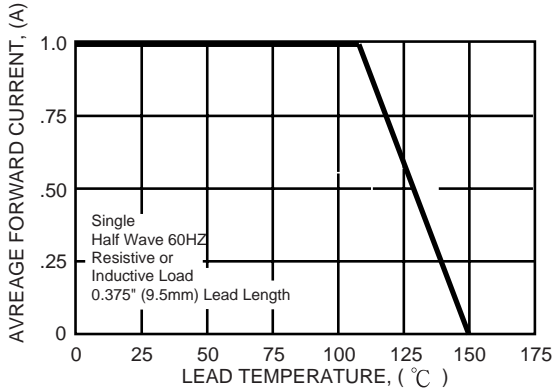


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

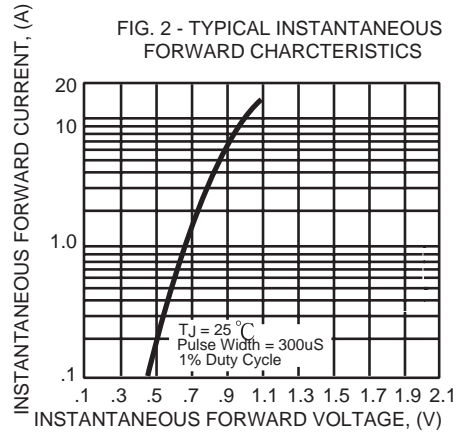


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

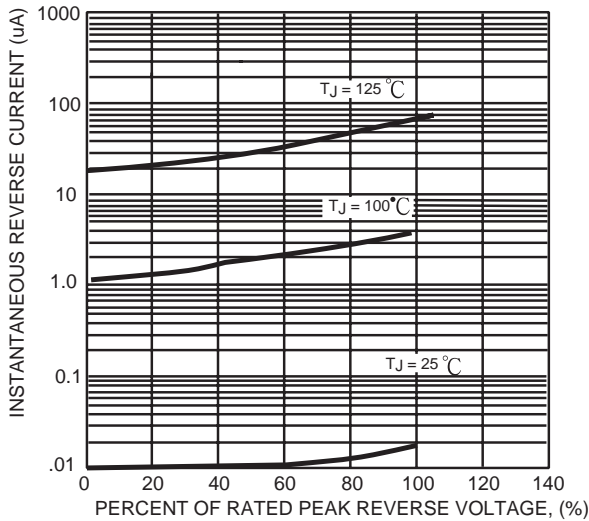


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

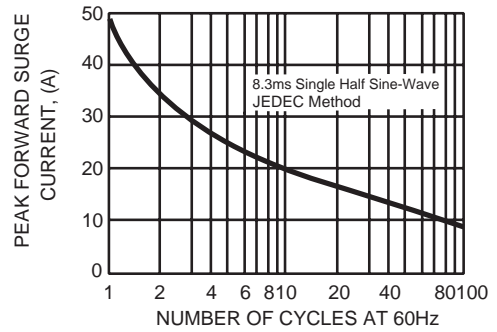


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

