

Schottky Barrier Rectifier

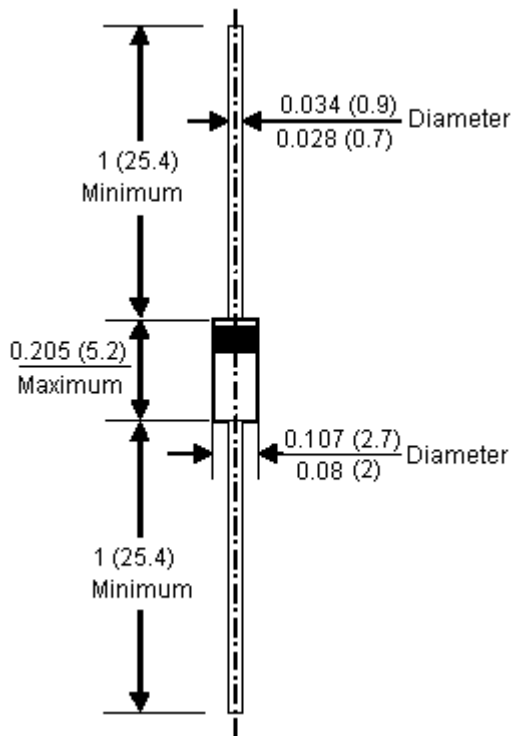


Features:

- Metal-semiconductor junction with guard ring.
- Epitaxial construction.
- Low forward voltage drop.
- High current capability.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Reverse Voltage - 100 V
Forward Current - 1 Ampere

DO - 41



Dimensions : Inches (Millimetres)

Mechanical Data

| | |
|-------------------|--------------------------------|
| Case | : JEDEC DO-41 moulded plastic. |
| Polarity | : Colour band denotes cathode. |
| Weight | : 0.012 oz, 0.34 g. |
| Mounting position | : Any. |

Schottky Barrier Rectifier



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

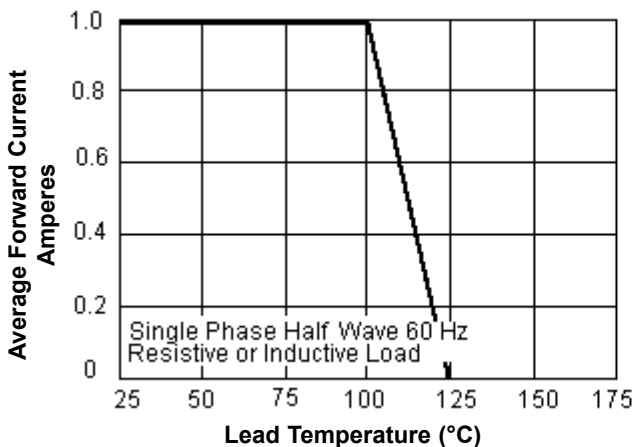
For capacitive load, derate current by 20%.

| Characteristics | Symbol | SR1100 | Unit |
|--|-----------------|-------------|--------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 100 | V |
| Maximum RMS Voltage | V_{RMS} | 70 | |
| Maximum DC Blocking Voltage | V_{DC} | 100 | |
| Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Lengths at $T_L = 100^\circ\text{C}$ | $I_{(AV)}$ | 1 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC Method) | I_{FSM} | 40 | |
| Peak Forward Voltage at 1 A dc | V_F | 0.85 | V |
| Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage at $T_J = 100^\circ\text{C}$ | I_R | 1 10 | mA |
| Typical Junction Capacitance (Note 1) | C_J | 80 | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL}$ | 15 | $^\circ\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | |

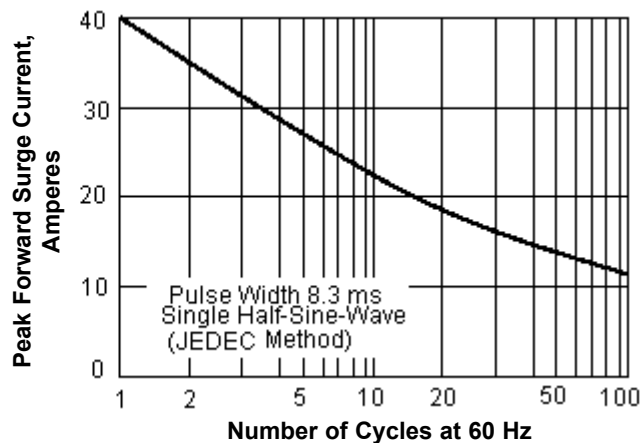
- Notes :**
1. Measured at 1 MHz and applied reverse voltage of 4 V dc.
 2. Thermal resistance junction to lead.

Rating and Characteristics Curves

Forward Current Derating Curve



Maximum Non-Repetitive Surge Current

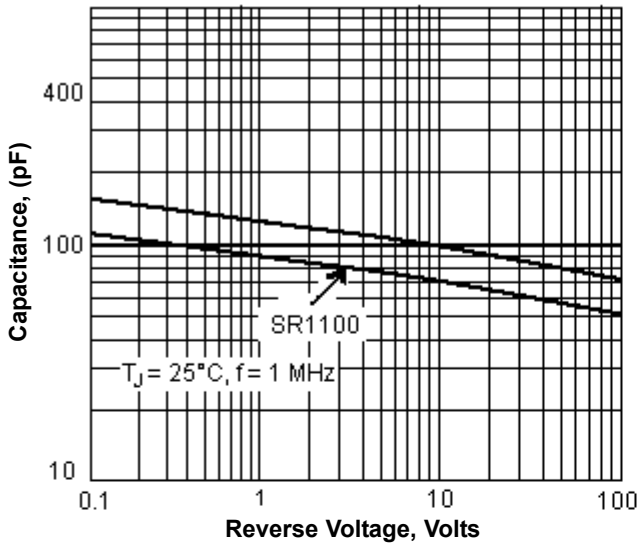


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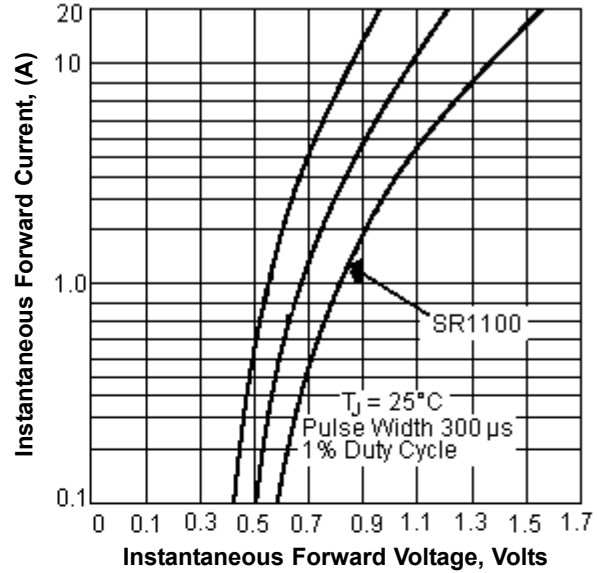


Rating and Characteristics Curves

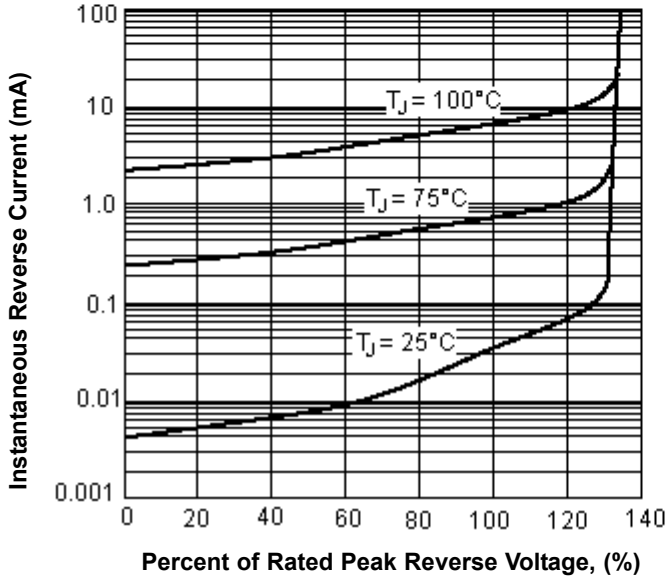
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



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