

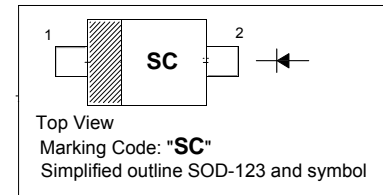
Surface Mount Schottky Barrier Diode

Features

- Very low forward voltage
- High Current Capability

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|--|-----------------|---------------|--------------------|
| Peak Reverse Voltage | V_{RRM} | 20 | V |
| Working Peak Reverse Voltage | V_{RWM} | 20 | V |
| DC Reverse Voltage | V_R | 20 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 0.5 | A |
| Non-Repetitive Peak Forward Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz) | I_{FSM} | 5.5 | A |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 340 | $^\circ\text{C/W}$ |
| Thermal Resistance Junction to Lead | $R_{\theta JL}$ | 150 | $^\circ\text{C/W}$ |
| Junction Temperature | T_j | - 65 to + 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | - 65 to + 150 | $^\circ\text{C}$ |

¹⁾ Following any rated load condition and with rated V_{RRM} applied.

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Max. | Unit |
|---|-----------|-------------------------------|--|
| Forward Voltage at $I_F = 0.1\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$ at $I_F = 0.5\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$ at $I_F = 0.1\text{ A}$, $T_j = 100\text{ }^\circ\text{C}$ at $I_F = 0.5\text{ A}$, $T_j = 100\text{ }^\circ\text{C}$ | V_F | 0.375 0.44 0.26 0.36 | V |
| Reverse Current at $V_R = 10\text{ V}$, $T_j = 25\text{ }^\circ\text{C}$ at $V_R = 20\text{ V}$, $T_j = 25\text{ }^\circ\text{C}$ at $V_R = 10\text{ V}$, $T_j = 100\text{ }^\circ\text{C}$ at $V_R = 20\text{ V}$, $T_j = 100\text{ }^\circ\text{C}$ | I_R | 40 150 3 7 | μA μA mA mA |
| Total Capacitance at $V_R = 5\text{ V}$ (test signal range 100 KHz to 1 MHz), $T_j = 25\text{ }^\circ\text{C}$ | C_{tot} | 110 | pF |

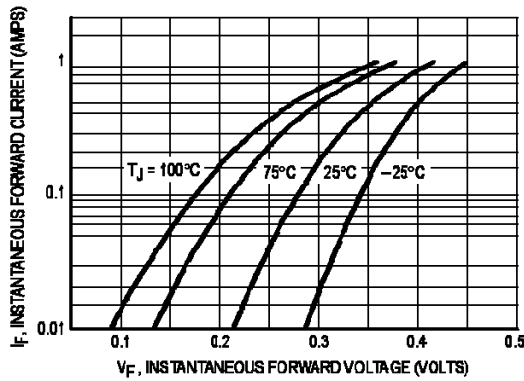


Figure 1. Typical Forward Voltage

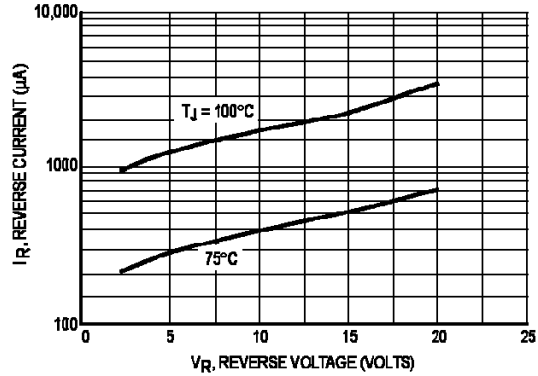


Figure 2. Typical Reverse Current

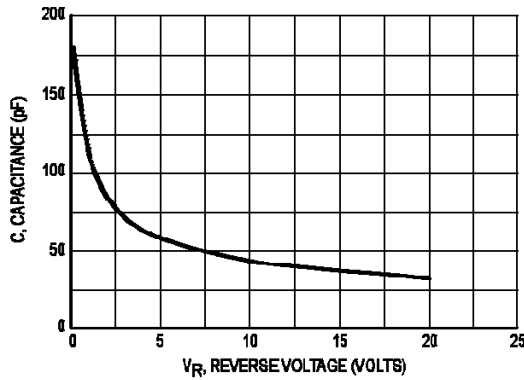


Figure 3. Typical Capacitance

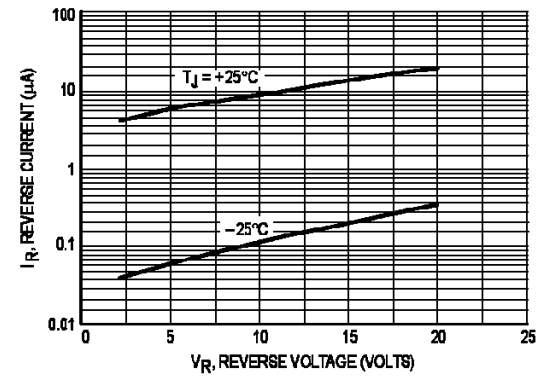


Figure 4. Typical Reverse Current

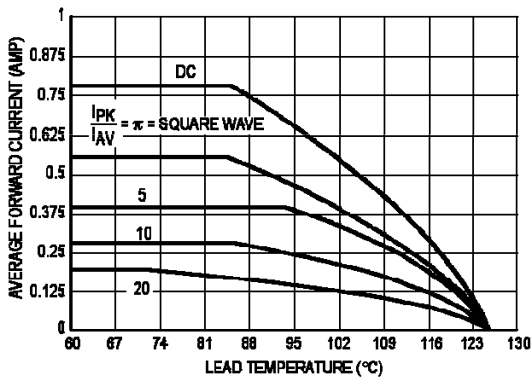


Figure 5. Current Derating (Lead)

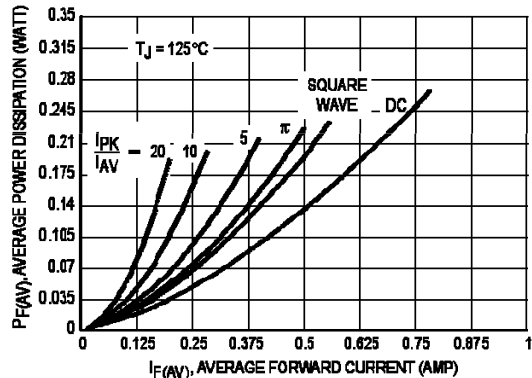


Figure 6. Power Dissipation