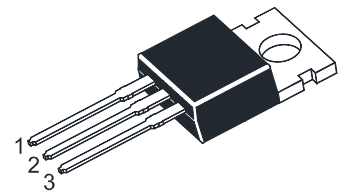
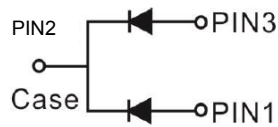


SDB10300CT

Surface Mount Schottky Barrier Rectifier

Features

- Low Forward Voltage Drop
- Reliable High Temperature Operation



TO-220 Plastic Package

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$ unless otherwise specified

| Parameter | Symbol | Value | Unit |
|--|-----------------|---------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 300 | V |
| Working Peak Reverse Voltage | V_{RWM} | 300 | V |
| DC Blocking Voltage | V_R | 300 | V |
| Average Forward Current | $I_{F(AV)}$ | 10 | A |
| Peak Forward Surge Current at 1/2 60 Hz | I_{FSM} | 120 | A |
| Peak repetitive reverse current at $t_p = 2 \mu\text{s}$, 1 KHz | I_{RRM} | 1 | A |
| Typical Thermal Resistance Junction to Case | $R_{\theta JC}$ | 6 | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range | T_j | - 65 to + 175 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 65 to + 175 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Max. | Unit |
|---|--------|-------------|---------------------|
| Forward Voltage ¹⁾ at $I_F = 5 \text{ A}$ at $I_F = 5 \text{ A}$, $T_j = 125^\circ\text{C}$ | V_F | 0.92 0.8 | V |
| Reverse Current ¹⁾ at $V_R = 300 \text{ V}$ at $V_R = 300 \text{ V}$, $T_j = 125^\circ\text{C}$ | I_R | 100 10 | μA mA |

¹⁾ Pulse width < 300 μs , Duty cycle < 2%.

SDB10300CT

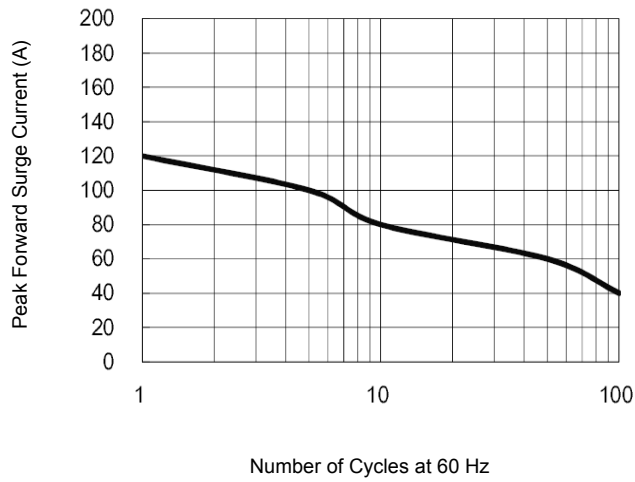


Figure 1. Maximum Repetitive Surge Current

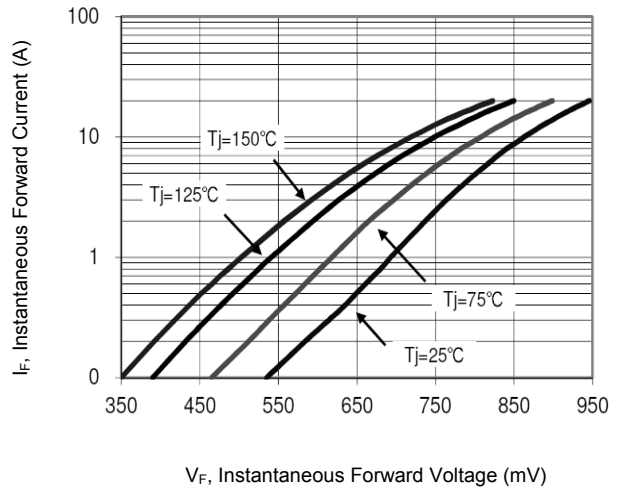


Figure 2. Typical Forward Voltage

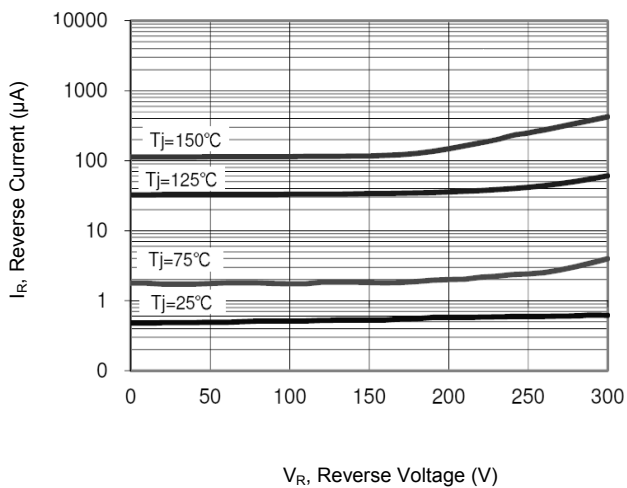


Figure 3. Typical Reverse Current

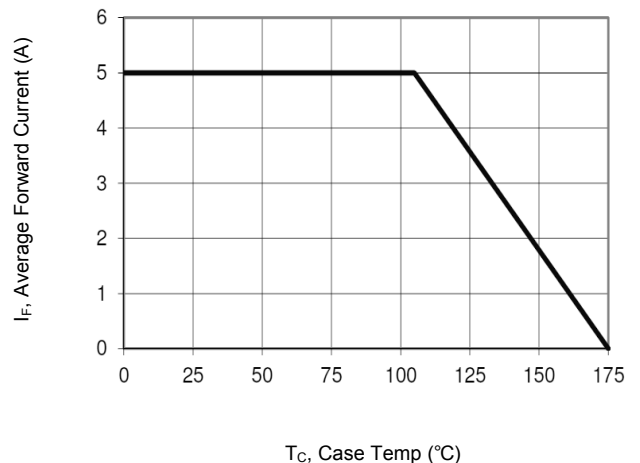


Figure 4. Current Derating, Case

SDB10300CT

Package Outline Dimensions (Units: mm)

