

SB20100LCT

Unit: inch (mm)

DUAL LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volts **CURRENT** 20 Amperes

FEATURES

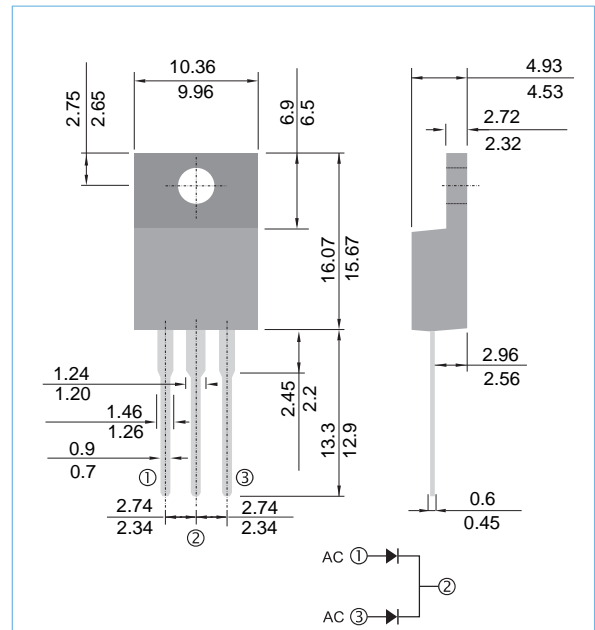
- Low forward voltage drop, low power losses
- High efficiency operation
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : TO-220AB, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight: 0.0655 ounces, 1.859 grams.



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | VALUE | UNIT |
|---|-----------------|--------------|----------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 100 | V |
| Maximum average forward rectified current (Fig.3) | $I_{F(AV)}$ | 20 10 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode | I_{FSM} | 200 | A |
| Typical thermal resistance | $R_{\theta JC}$ | 2.5 | $^{\circ}\text{C/W}$ |
| Operating junction | T_J | -55 to + 150 | $^{\circ}\text{C}$ |
| Storage temperature range | T_{STG} | -55 to + 150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|--|----------|-------------------------------------|------|--------------|--------------|---------------------|
| Breakdown voltage per diode | V_{BR} | $I_R=1.0\text{mA}$ | 103 | 120 | - | V |
| Instantaneous forward voltage per diode ⁽¹⁾ | V_F | $I_F=5\text{A}$ $I_F=10\text{A}$ | - | 0.55 - | 0.60 0.75 | V |
| | | $I_F=5\text{A}$ $I_F=10\text{A}$ | - | 0.52 0.62 | - 0.7 | V |
| Reverse current per diode ⁽²⁾ | I_R | $V_R=70\text{V}$ | - | 12 | 40 | μA |
| | | $V_R=100\text{V}$ | - | - | 500 35 | μA mA |

Note.1 Pulse test : 380 μs pulse width, 1% duty cycle

2. Pulse test : Pulse width $\leq 2.5\text{ms}$

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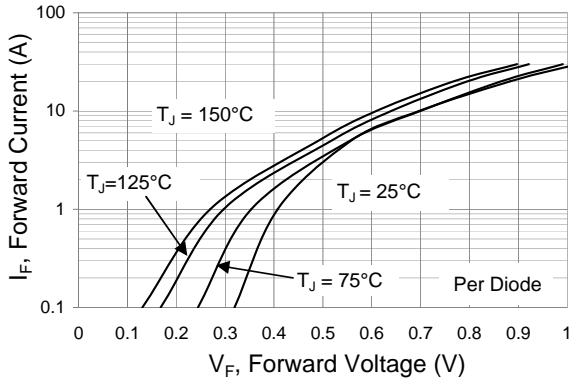


Fig.1 Typical Forward Characteristics

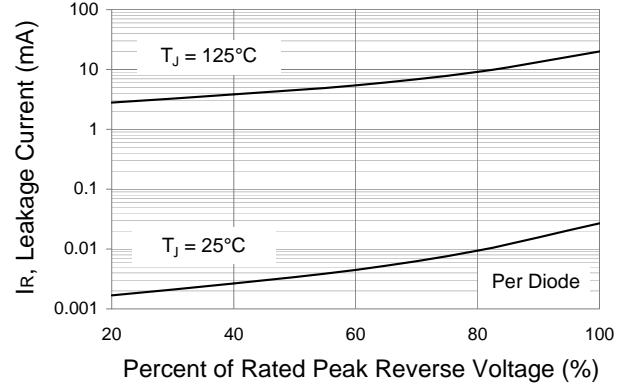


Fig.2 Typical Reverse Characteristics

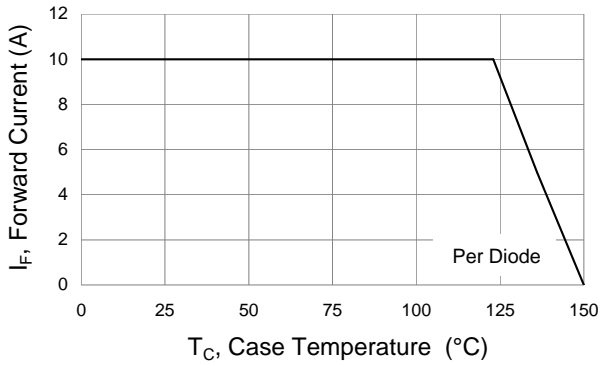


Fig.3 Forward Current Derating Curve

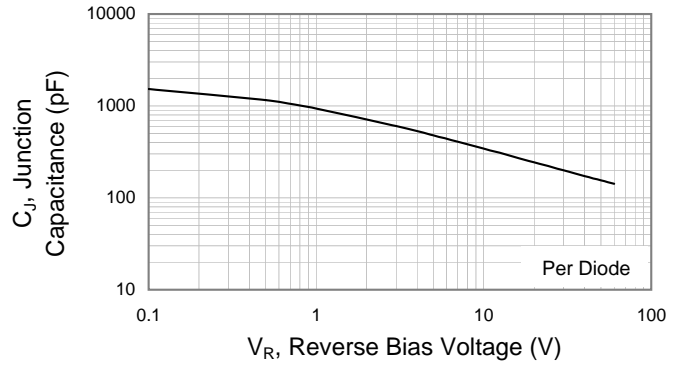


Fig.4 Typical Junction Capacitance