



SB30100LFYT

LOW VF SCHOTTKY BARRIER RECTIFIER

VOLTAGE 100 Volt **CURRENT** 30 Ampere

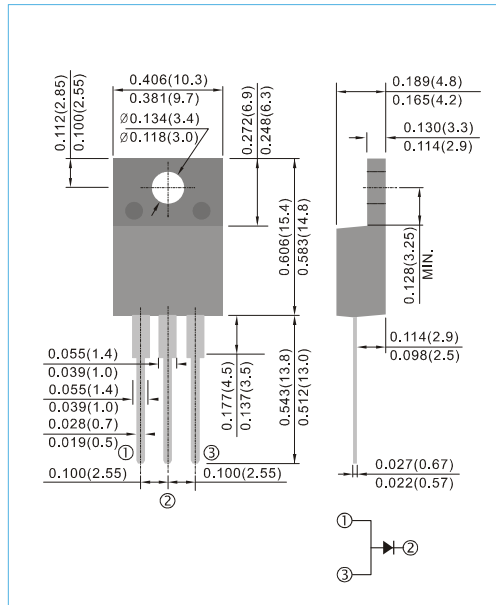
FEATURES

- Low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : ITO-220AB, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.056 ounces, 1.6 grams

ITO-220AB Unit : inch(mm)



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

| PARAMETER | SYMBOL | VALUE | UNIT |
|---|-----------------|--------------|-----------------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 100 | V |
| Maximum average forward rectified current (Fig.1) | $I_{F(AV)}$ | 30 15 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode | I_{FSM} | 275 | A |
| Typical thermal resistance | $R_{\theta Jc}$ | 4.5 | $^\circ\text{C} / \text{W}$ |
| Operating junction | T_J | -55 to + 150 | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 to + 150 | $^\circ\text{C}$ |

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

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|--|----------|---|-------------|------------------|-------------|---------------|
| Breakdown voltage | V_{BR} | $I_R=1.0\text{mA}$ | 103 | 120 | - | V |
| Instantaneous forward voltage per diode (Note 1) | V_F | $I_F=5\text{A}$ $I_F=15\text{A}$ $I_F=30\text{A}$ | - - - | 0.5 0.71 - | - - 1 | V |
| Reverse current per diode (Note 2) | I_R | $V_R=70\text{V}$ | - | 10 | - | μA |
| | | $V_R=100\text{V}$ | - | - | 200 | μA |

Notes :

- 1 Pulse test : 380 μs pulse width, 1% duty cycle
2. Pulse test : Pulse width $\leq 2.5\text{ms}$



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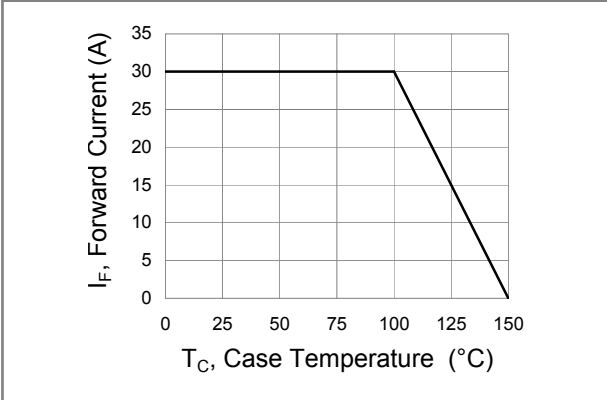


Fig.1 Forward Current Derating Curve

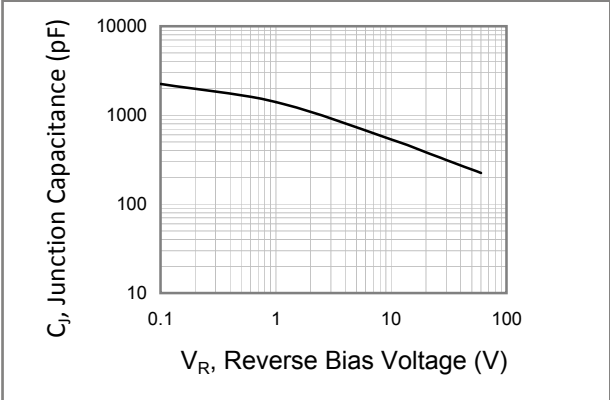


Fig.2 Typical Junction Capacitance

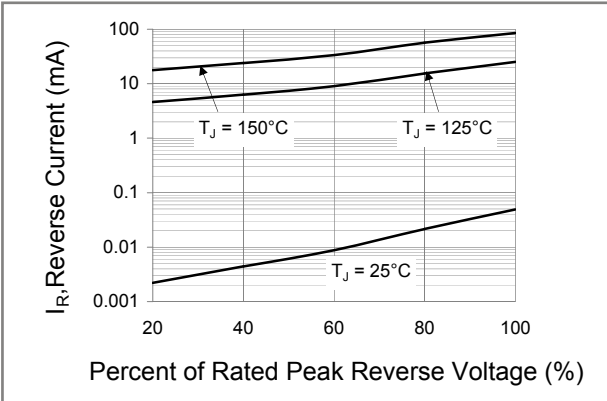


Fig.3 Typical Reverse Characteristics

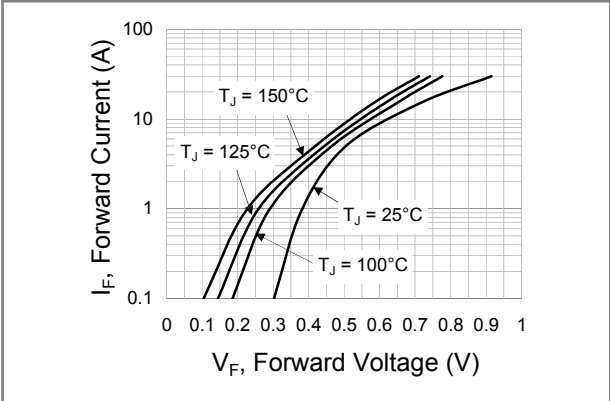


Fig.4 Typical Forward Characteristics



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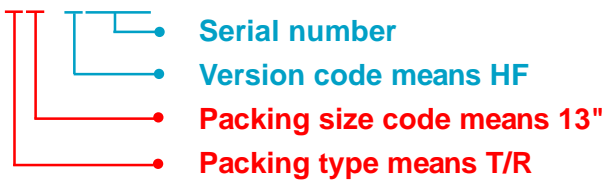
Part No_packing code_Version

SB30100LFYT_T0_00001

For example :

RB500V-40_R2_00001

Part No.



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



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