



SBT20100UFCT

EXTREME LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volt **CURRENT** 20 Ampere

FEATURES

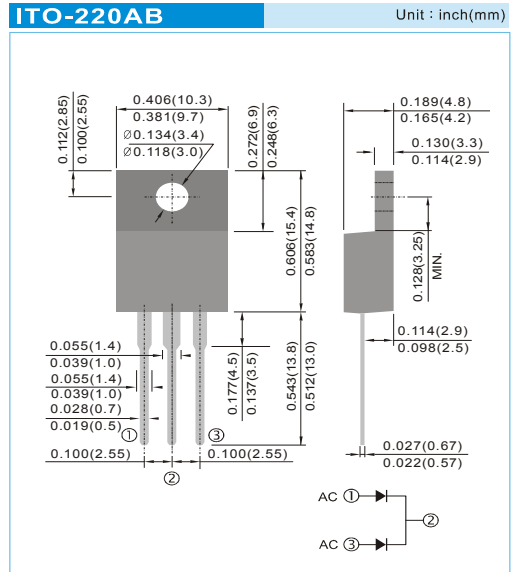
- Extreme low forward voltage drop, low power losses
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directives

MECHANICAL DATA

Case : ITO-220AB, Plastic

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

Weight : 0.056 ounces, 1.6 grams.



MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | VALUE | UNIT |
|---|--------------------|--------------|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 100 | V |
| Maximum rms voltage | V _{RMS} | 70 | V |
| Maximum dc blocking voltage | V _R | 100 | V |
| Maximum average forward rectified current | I _{F(AV)} | 20 10 | A |
| Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 200 | A |
| Typical thermal resistance | R _{θJC} | 15 | °C/W |
| Operating junction temperature range | T _J | -55 to + 150 | °C |
| Storage temperature range | T _{STG} | -55 to + 150 | °C |

Note : 1. Mounted on infinite heatsink.

ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN. | TYP. | MAX. | UNIT | |
|---|-----------------|-----------------------|-----------------------|------|------|------|----|
| Breakdown voltage per diode | V _{BR} | I _R =0.5mA | 100 | - | - | V | |
| Instantaneous forward voltage per diode | V _F | I _F =3A | - | 0.45 | - | V | |
| | | I _F =5A | - | 0.49 | - | V | |
| | | I _F =10A | - | 0.59 | 0.65 | V | |
| | | I _F =3A | - | 0.36 | - | V | |
| | | I _F =5A | - | 0.43 | - | V | |
| | | I _F =10A | - | 0.56 | - | V | |
| Reverse current per diode | I _R | V _R =80V | - | 10 | - | μA | |
| | | V _R =100V | T _J =25°C | - | - | 180 | μA |
| | | | T _J =125°C | - | 15 | - | mA |
| | | | | - | - | - | mA |



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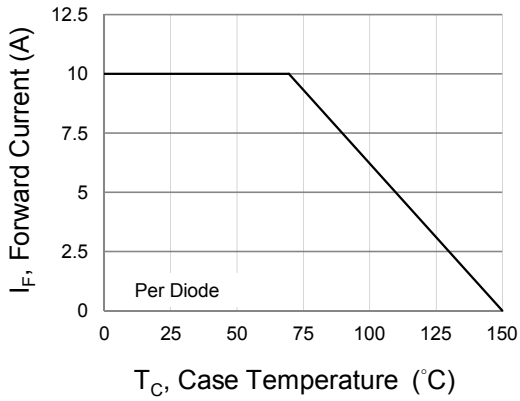


Fig.1 Forward Current Derating Curve

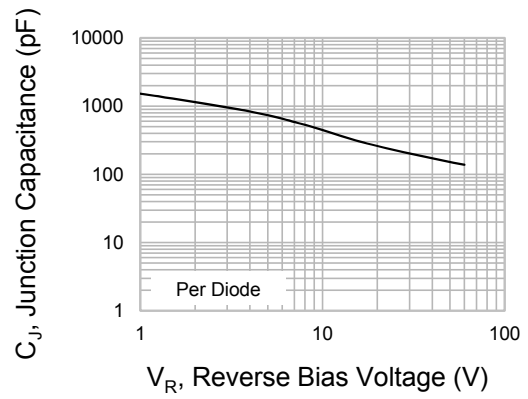


Fig.2 Typical Junction Capacitance

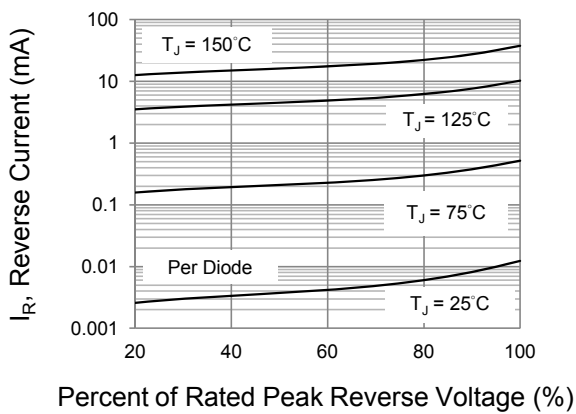


Fig.3 Typical Reverse Characteristics

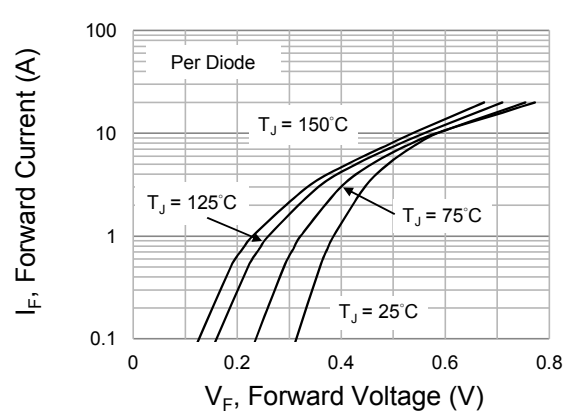


Fig.4 Typical Forward Characteristics



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Part No_packing code_Version

SBT20100UFCT_T0_00001

SBT20100UFCT_T0_10001

For example :

RB500V-40_R2_00001



| 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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