



#### **ULTRA LOW VF SCHOTTKY RECTIFIER**

VOLTAGE 100 Volt CURRENT 20 Ampere

#### **FEATURES**

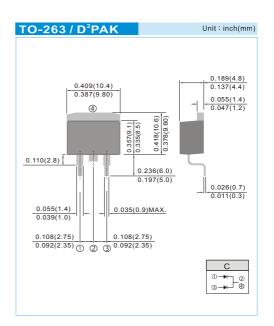
- Ultra low forward voltage drop, low power loss
- · High efficiency operation
- · Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

#### **MECHANICAL DATA**

Case: TO-263/D2PAK, Plastic

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

Weight: 0.049 ounces, 1.38 grams.



#### MAXIMUM RATINGS(TA=25°C unless otherwise noted)

| PARAMETER   |                         | SYMBOL  | VALUE        | UNIT |
|---|-------------------------|---------|--------------|------|
| Maximum repetitive peak reverse voltage   |                         | VRRM    | 100          | ٧    |
| Maximum rms voltage   |                         | VRMS    | 70           | V    |
| Maximum dc blocking voltage   |                         | VR      | 100          | V    |
| Maximum average forward rectified current   | per device<br>per diode | I F(AV) | 20<br>10     | Α    |
| Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load | per diode               | IFSM    | 150          | Α    |
| Typical junction capacitance (VR=4V, f=1MHz)  |                         | ည       | 620          | pF   |
| Typical thermal resistance per diode  | (Note 1)                | Rөjc    | 3.5          | °C/W |
| Operating junction temperature range  |                         | TJ      | -55 to + 150 | °C   |
| Storage temperature range   |                         | Тѕтс    | -55 to + 150 | °C   |

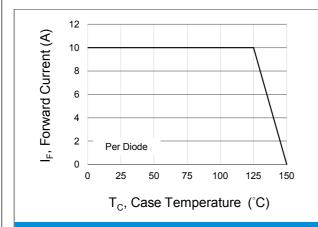
Note: 1. Mounted on infinite heatsink.



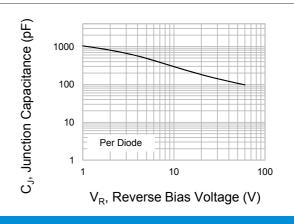


#### ELECTRICAL CHARACTERISTICS(TA=25°C unless otherwise noted)

| PARAMETER                               | SYMBOL | TEST CONDITIONS             |                      | MIN. | TYP.                 | MAX.           | UNIT     |
|---|--------|-----------------------------|----------------------|------|----------------------|----------------|----------|
| Breakdown voltage per diode             | VBR    | I <sub>R</sub> =0.5mA       |                      | 100  | -                    | -              | V        |
| Instantaneous forward voltage per diode | VF     | I F=3A<br>I F=5A<br>I F=10A | T <sub>J</sub> =25°C |      | 0.47<br>0.53<br>0.66 | -<br>-<br>0.71 | V        |
|   |        | I F=3A<br>I F=5A<br>I F=10A | TJ=125°C             |      | 0.4<br>0.49<br>0.61  | -<br>-<br>-    | V        |
| Reverse current per diode               |        | VR=70V                      |                      | -    | 5                    | -              | μΑ       |
|   | l R    | V <sub>R</sub> =100V        | TJ=25°C<br>TJ=125°C  | -    | -<br>7.2             | 80<br>-        | μA<br>mA |



**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

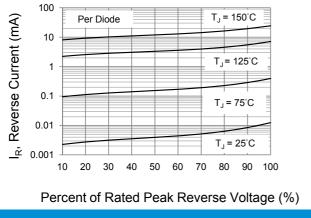
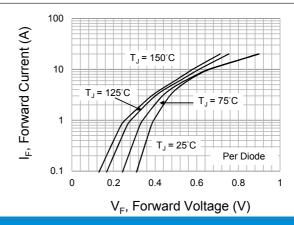


Fig.3 Typical Reverse Characteristics



**Fig.4 Typical Forward Characteristics** 

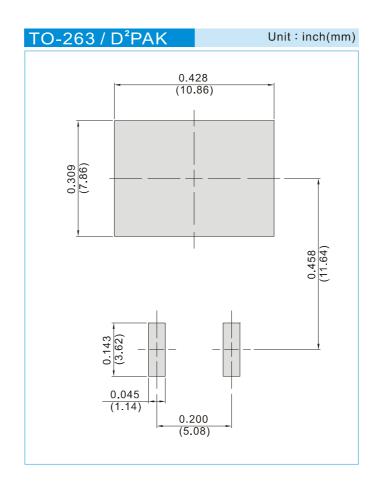




#### PART NO PACKING CODE VERSION

| Part No Packing Code | Package Type | Packing Type       | Marking     | Version      |
|----------------------|--------------|--------------------|-------------|--------------|
| SBT20100VDC_R2_00001 | TO-263       | 800 pcs / 13" Reel | SBT20100VDC | Halogen free |

#### **MOUNTING PAD LAYOUT**







### **Disclaimer**

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties
  of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation.
   Customers are responsible in comprehending the suitable use in particular applications.
   Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

单击下面可查看定价,库存,交付和生命周期等信息

>>Panjit(强茂)