



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

VOLTAGE 100 Volt CURRENT 20 Ampere

#### **FEATURES**

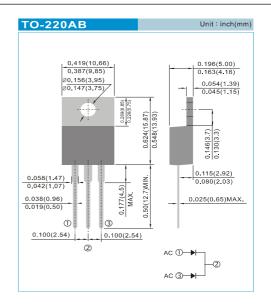
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive

#### **MECHANICAL DATA**

Case: TO-220AB, Plastic

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

Weight: 0.067 ounces, 1.89 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 per diode	l F(AV)	20 10	А
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I FSM	150	А
Typical thermal resistance	(Note 1)	Rejc	2	°C/W
Operating junction temperature range		TJ	-55 to + 150	°C
Storage temperature range		Тѕтс	-55 to + 150	°C

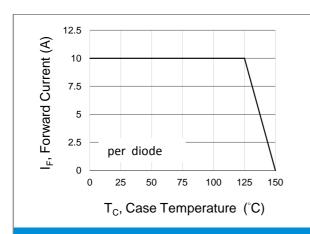
Note: 1. Device mounted on a infinite heatsink.

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

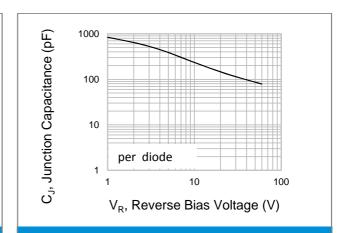
PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	VBR	I R=0.5mA	TJ=25°C	100	-	-	V
Instantaneous forward voltage per diode	VF	I F=1A I F=5A I F=10A	TJ=25°C	- - -	0.4 0.56 0.7	- - 0.75	V
		I F=1A I F=5A	T <sub>J</sub> =125°C	-	0.30 0.52	-	٧
Reverse current per diode	l R	VR=80V	TJ=25°C	-	5	-	μΑ
		VR=100V	TJ=25°C TJ=125°C	-	- 5	60 -	μA mA







**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

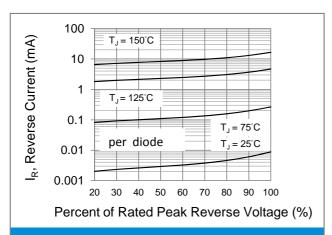


Fig.3 Typical Reverse Characteristics

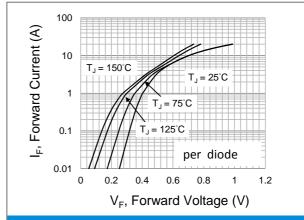


Fig.4 Typical Forward Characteristics

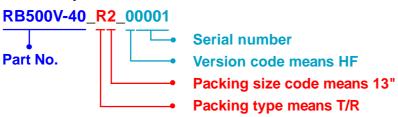




### Part No\_packing code\_Version

SBT20100LCT\_T0\_00001 SBT20100LCT\_T0\_10001

### For example:



Packing Code XX					Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code		
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number		
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number		
Bulk Packing (B/P)	В	13"	2					
Tube Packing (T/P)	Т	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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