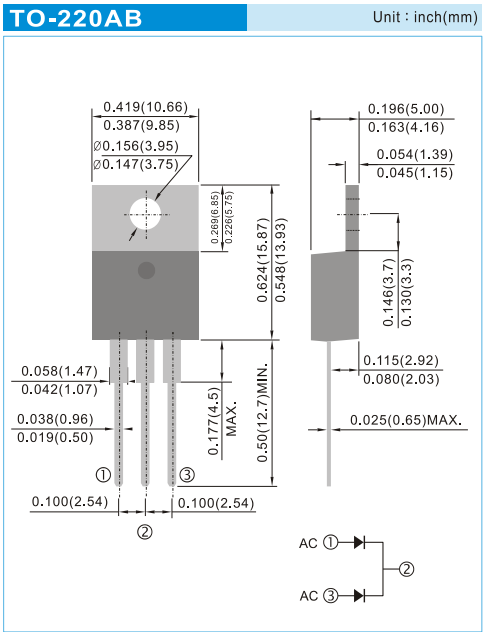
SBT20120LCT

ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

Voltage	120 V	Current	20 A



Features

- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Easy pick and place package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

Mechanical Data

- Case: Molded plastic, TO-220AB
- Terminals: solder plated, solderable per MIL-STD-750,Method 2026
- Approx. Weight: 0.067 ounces, 1.89 grams
- Marking: Part number

Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	120	V
Maximum rms voltage		V_{RMS}	84	V
Maximum dc blocking voltage		V_R	120	V
Maximum average forward rectified current	per diode per device	$I_{F(AV)}$	10 20	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load per diode		I_{FSM}	150	A
Typical thermal resistance per diode	(Note 1)	$R_{\theta JC}$	3	°C/W
Operating junction temperature range		T_J	-55 to +150	°C
Storage temperature range		T_{STG}	-55 to +150	°C

Note : 1. Device mounted on a infinite heatsink .

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Electrical Characteristics (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNITS
Breakdown voltage per diode	V_{BR}	I_R=0.5mA	T_J=25°C	120	-	-	V
Instantaneous forward voltage per diode	V_F	I_F=1A I_F=5A I_F=10A	T_J=25°C	- - -	0.51 0.7 0.77	- - 0.82	V
		I_F=1A I_F=5A	T_J=125°C	- -	0.41 0.57	- -	V
Reverse current per diode	I_R	V_R=96V	T_J=25°C	-	2	-	μA
		V_R=120V	T_J=25°C T_J=125°C	- -	- 2.6	20 -	μA mA

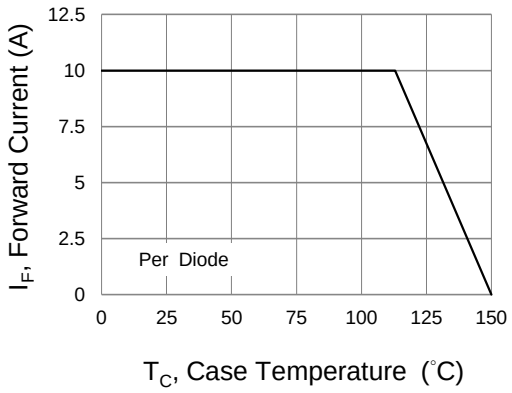

Fig.1 Forward Current Derating Curve

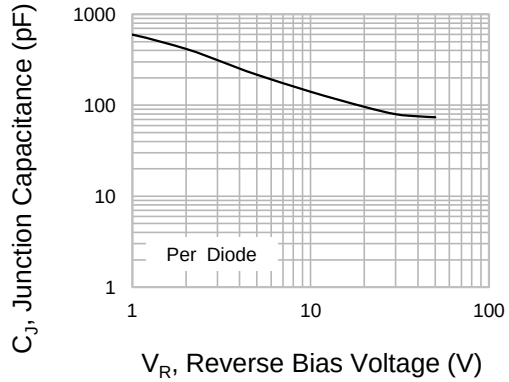

Fig.2 Typical Junction Capacitance

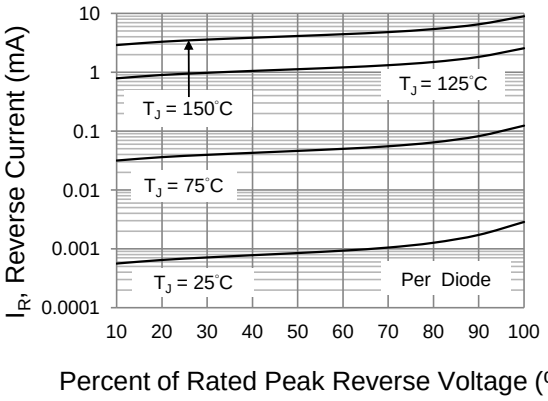

Fig.3 Typical Reverse Characteristics

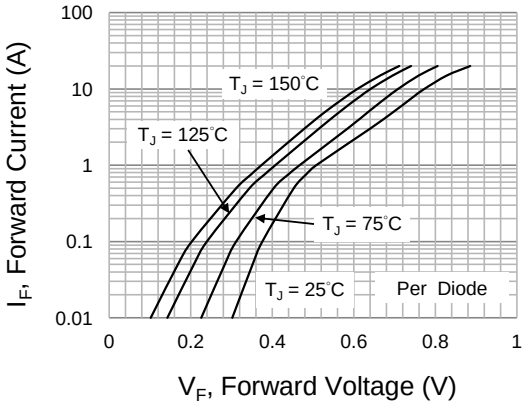

Fig.4 Typical Forward Characteristics

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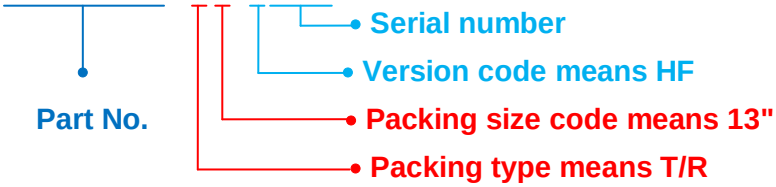
Part No_packing code_Version

SBT20120LCT_T0_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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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