SBT20100VDC

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volts **CURRENT** 20 Amperes

FEATURES

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

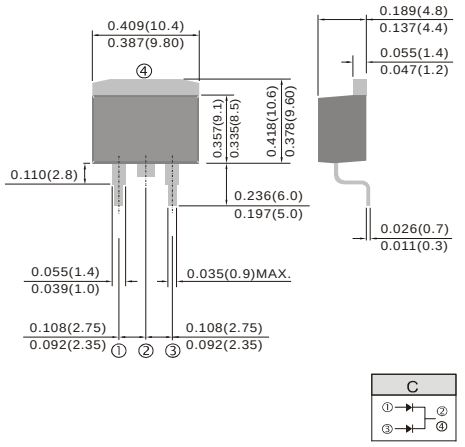
MECHANICAL DATA

Case : TO-263/D²PAK, Plastic

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

Weight: 0.0514 ounces, 1.46 grams.

TO-263 / D²PAK Unit : inch(mm)



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	per device per diode	$I_{F(AV)}$	20 10	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	per diode	I_{FSM}	150	A
Typical junction capacitance (V_R=4V, f=1MHz)		C_J	620	pF
Typical thermal resistance per diode	(Note 1)	$R_{\Theta JC}$	3.5	°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.

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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 I_F=5A I_F=10A	T_J=25°C	- - -	0.47 0.53 0.66	- - 0.71	V
		I_F=3A I_F=5A I_F=10A	T_J=125°C	- - -	0.4 0.49 0.61	- - -	V
Reverse current per diode	I_R	V_R=70V		-	5	-	μA
		V_R=100V	T_J=25°C T_J=125°C	- -	- 7.2	80 -	μA mA

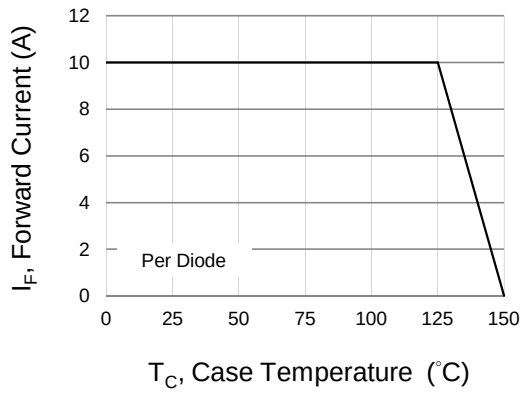

Fig.1 Forward Current Derating Curve

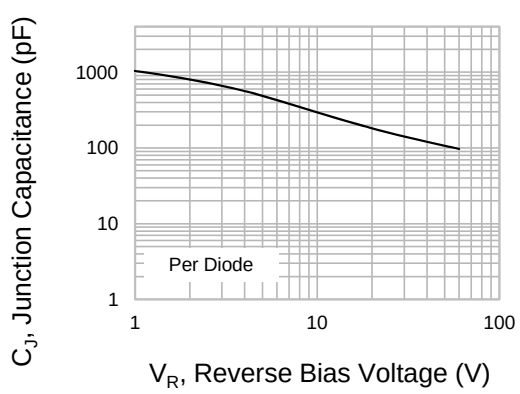

Fig.2 Typical Junction Capacitance

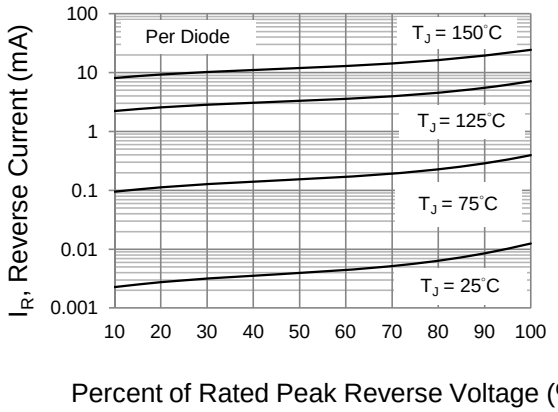

Fig.3 Typical Reverse Characteristics

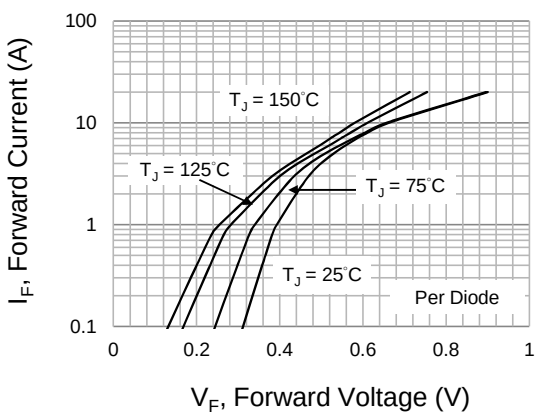

Fig.4 Typical Forward Characteristics

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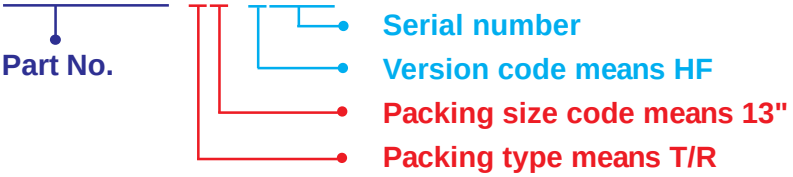
Part No_packing code_Version

SBT20100VDC_T0_00001

SBT20100VDC_T0_10001

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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