

SBM2045VCT

UITRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE

ENT 20 Ampere

FEATURES

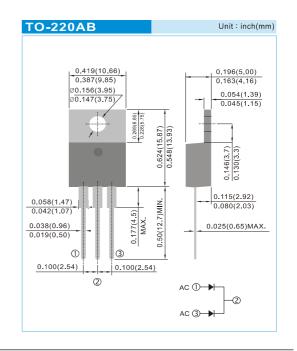
• Ultra Low forward voltage drop, low power loss

45 Volt

- · High efficiency operation
- · Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : TO-220AB, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight: 0.067 ounces, 1.89 grams



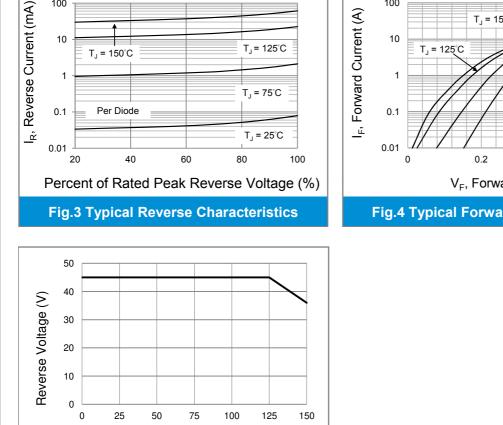
MAXIMUM RATINGS(Ta=25°C unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage		Vrrm	45	V
Maximum average forward rectified current	per diode per device	l f(AV)	20 10	А
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	per diode	I FSM	280	А
Typical junction capacitance (VR=4V, f=1MHz)		CJ	860	pF
Typical thermal resistance per diode	(Note 1)	Røjc	2	°C/W
Operating junction temperature range		TJ	-55 to + 150	°C
Storage temperature range		Тѕтс	-55 to + 150	٥C

Note : 1. Mounted on infinite heatsink.

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

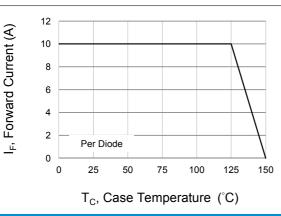
PARAMETER	SYMBOL	TEST CC	NDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	VBR	I R=0.5mA		45	-	-	V
Instantaneous forward voltage per diode	VF	IF=1A IF=5A IF=10A	TJ=25°C	- - -	0.28 0.36 0.41	- - 0.45	v
		I	TJ=125°C	- - -	0.18 0.28 0.36	- - -	v
Reverse current per diode	IR	Vr=36V		-	100	-	μA
		VR=45V	TJ=25°C TJ=125°C	-	- 35	320	μA mA





T_J, Junction Temperature (°C)

Fig.5 Operating Temperature Derating Curve



SBM2045VCT



100



100



10

V_R, Reverse Bias Voltage (V)

Per Diode

10000

1000

100

1

C_J, Junction Capacitance (pF)

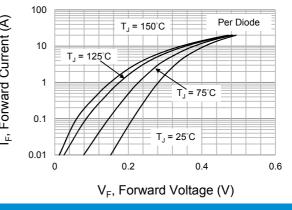
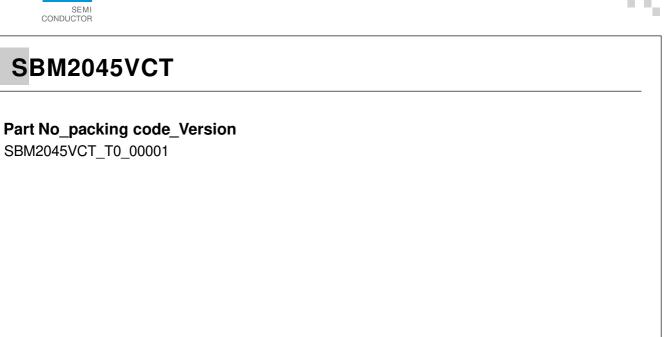


Fig.4 Typical Forward Characteristics





For example :

RB500V-40_R2_00001



Serial number
Version code means HF
Packing size code means 13"
Packing type means T/R

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)	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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