



SB4045LCT

LOW VF SCHOTTKY RECTIFIER

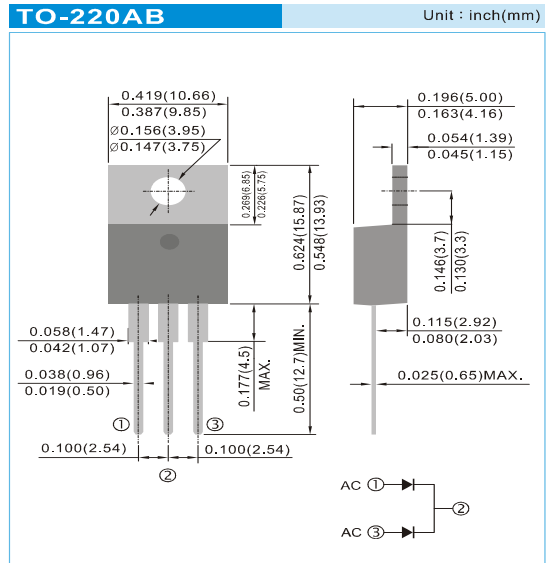
VOLTAGE 45 Volt **CURRENT** 40 Ampere

FEATURES

- Low forward voltage drop, low power loss
- 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(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	45	V
Maximum average forward rectified current	I _{F(AV)}	40 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	250	A
Typical Thermal Resistance per diode ⁽³⁾	R _{θJC}	1.9	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =1mA	45	-	-	V
Instantaneous forward voltage per diode ⁽¹⁾	V _F	I _F =5A	-	0.38	-	V
		I _F =10A	-	0.43	-	V
		I _F =20A	-	0.51	0.53	V
		I _F =5A	-	0.27	-	V
Reverse current per diode ⁽²⁾	I _R	V _R =36V	-	112	-	μA
		V _R =45V	-	-	500	μA
		T _J =25°C T _J =125°C	-	120	-	mA

Note.1.Pulse test : 300μs pulse width, 1% duty cycle

2.Pulse test : pulse width ≤ 40ms

3.Mounted on infinite heatsink

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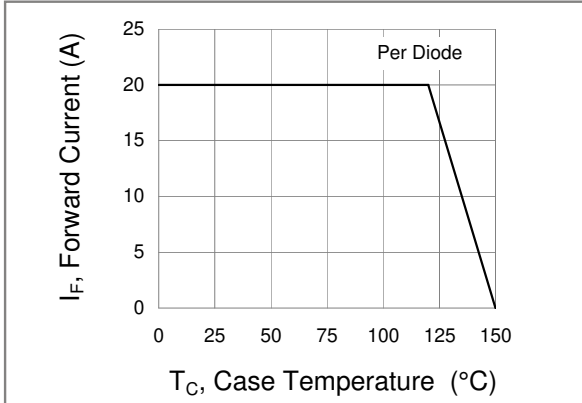


Fig.1 Forward Current Derating Curve

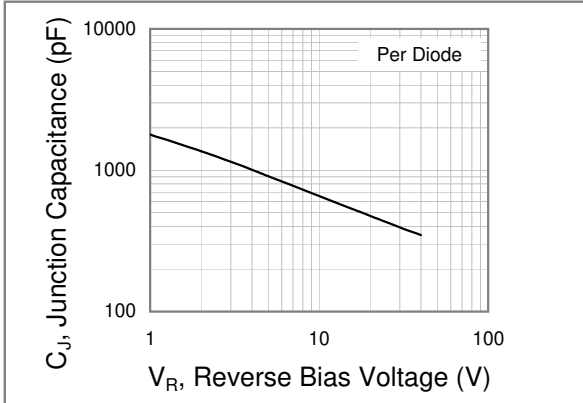


Fig.2 Typical Junction Capacitance

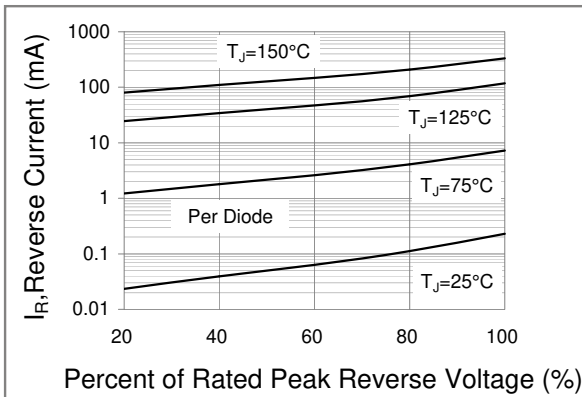


Fig.3 Typical Reverse Characteristics

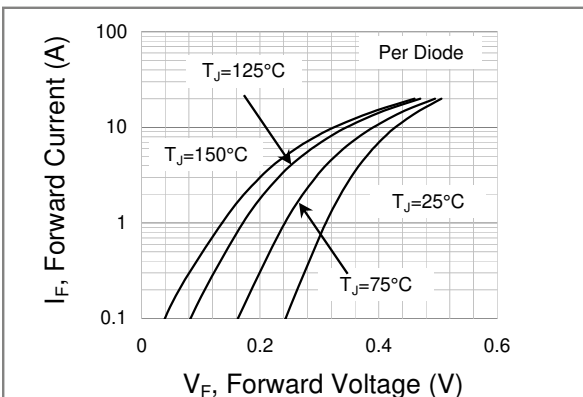


Fig.4 Typical Forward Characteristics



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Part No_packing code_Version

SB4045LCT_T0_00001

For example :

RB500V-40 R2 00001



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)	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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