

# SB1040LFCT

### **DUAL LOW VF SCHOTTKY RECTIFIER**

VOLTAGE

## CURRENT 10 Ampere

#### FEATURES

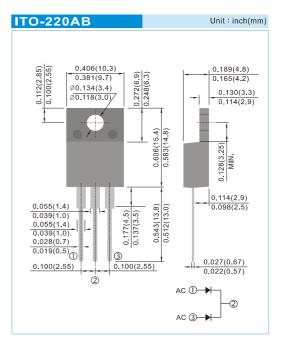
Low forward voltage drop, low power loss

40 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 : ITO-220AB, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.056 ounces, 1.6 grams



#### MAXIMUM RATINGS(TA=25°C unless otherwise noted)

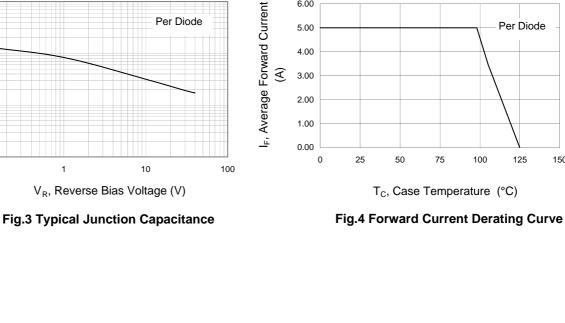
PARAMETER	SYMBOL	VALUE	UNIT	
Maximum repetitive peak reverse voltage		Vrrm	40	V
Maximum average forward rectified current (Fig.1)	num average forward rectified current (Fig.1) per device per diode		10 5	А
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode per diode		I FSM	125	A
Typical thermal resistance		Røjc	4.5	°C / W
Operating junction		TJ	-55 to + 125	°C
Storage temperature range		Тѕтс	-55 to + 150	°C

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

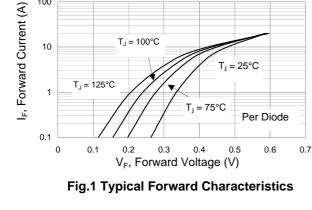
PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage	Vbr	I R=1mA		47	-	-	V
Instantaneous forward voltage per diode (1)	VF	I F=2.5A I F=5A	Tj=25°C	-	0.38 0.41	- 0.44	V
		I	TJ=125℃	-	0.27 0.32	- 0.35	V
Reverse current per diode (2)	Ir	VR=40V	TJ=25°C TJ=100°C	-	185 -	500 30	μA mA

Note.1.Pulse test : 300 $\mu s$  pulse width, 1% duty cycle

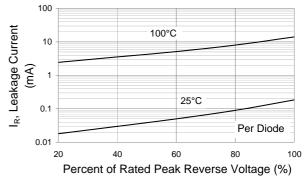
2.Pulse test : pulse width  $\leq$  40ms



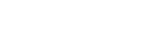
6.00



 $T_J = 100^{\circ}C$ 



**Fig.2 Typical Reverse Characteristics** 



150



100

10

10000

1000

100

10

0.1

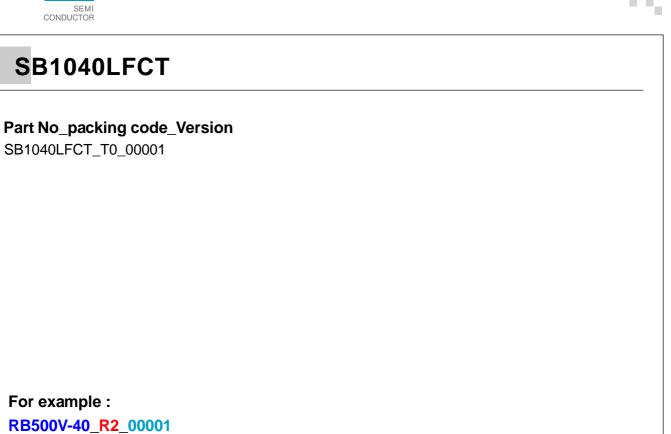
C<sub>J</sub>, Junction Capacitance (pF)

SB1040LFCT











- 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 <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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