



# SB30100LYT

## LOW VF SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 100 Volts **CURRENT** 30 Amperes

**TO-220AB**

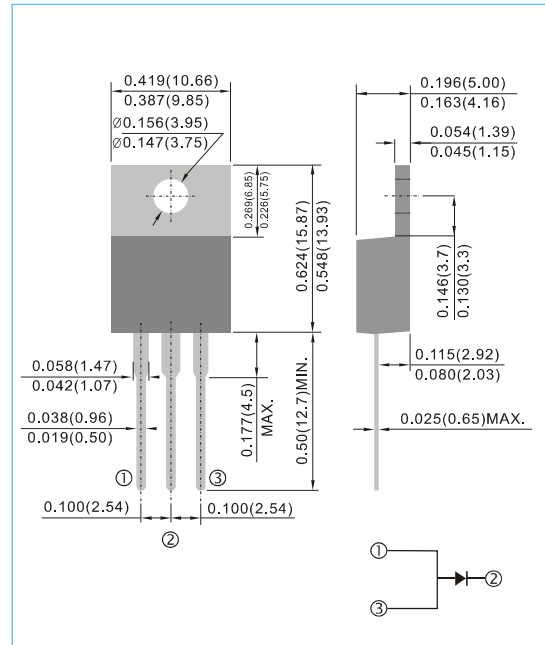
Unit : inch(mm)

### FEATURES

- 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-220AB, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.0655 ounces, 1.859 grams



### MAXIMUM RATINGS ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted )

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
Maximum average forward rectified current (Fig.1)	$I_{F(AV)}$	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	$I_{FSM}$	275	A
Typical thermal resistance	$R_{\theta Jc}$	2.5	$^\circ\text{C} / \text{W}$
Operating junction	$T_J$	-55 to + 150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to + 150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted )

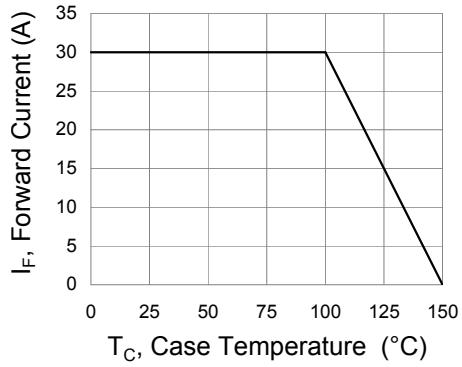
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	$V_{BR}$	$I_R=1.0\text{mA}$	103	120	-	V
Instantaneous forward voltage per diode ( Note 1 )	$V_F$	$I_F=5\text{A}$ $I_F=15\text{A}$ $I_F=30\text{A}$	- - -	0.50 0.71 -	- - 1.00	V
Reverse current per diode ( Note 2 )	$I_R$	$V_R=70\text{V}$	-	10	-	$\mu\text{A}$
		$V_R=100\text{V}$	-	-	200	$\mu\text{A}$

Notes :

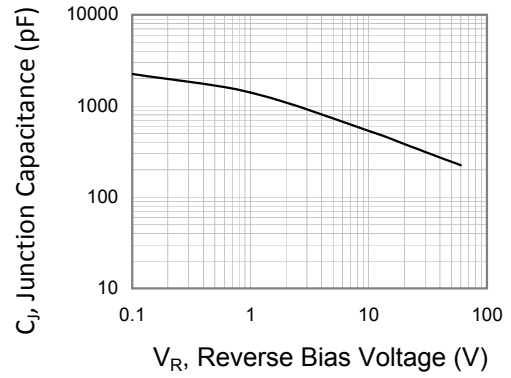
- 1 Pulse test : 380 $\mu\text{s}$  pulse width, 1% duty cycle
2. Pulse test : Pulse width < 2.5ms



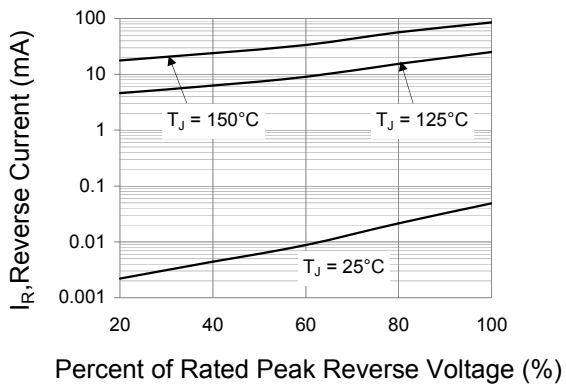
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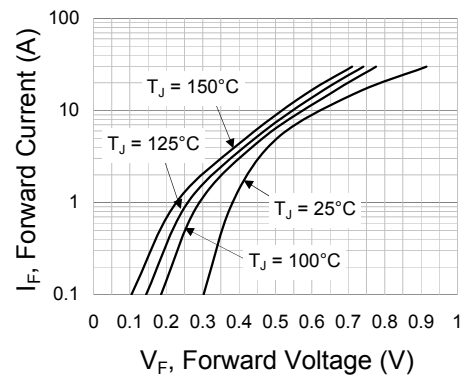
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



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## Part No\_packing code\_Version

SB30100LYT\_TO\_00001  
 SB30100LYT\_00001  
 SB30100LYT\_TO\_10001  
 SB30100LYT\_10001

For example :

**RB500V-40** **R2** **00001**



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)	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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