



SB30100LCT

DUAL HIGH-VOLTAGE SCHOTTKY RECTIFIER

VOLTAGE 100 Volts **CURRENT** 30 Amperes

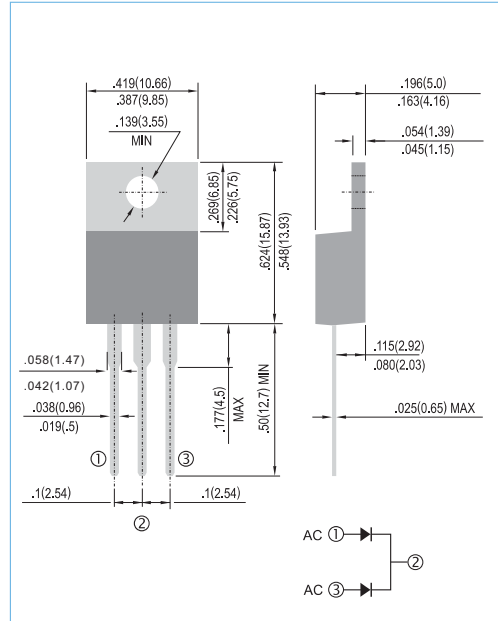
FEATURES

- Low forward voltage drop, low power losses
- High efficiency operation
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

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

TO-220AB 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 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
Non-repetitive avalanche energy at T _J =25°C,L=60mH per diode	E _{AS}	300	mJ
Typical Thermal Resistance	R _{θJC}	2.5	°C / W
Operating junction and storage temperature range	T _J ,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 per diode	V _{BR}	I _R =1.0mA	103	120	-	V
Instantaneous forward voltage per diode ⁽¹⁾	V _F	I _F =5A I _F =7.5A I _F =15A T _A =25°C	-	0.52 0.58 0.72	- - 0.80	V
		I _F =5A I _F =7.5A I _F =15A T _A =125°C	-	0.46 0.53 0.62	- - 0.68	V
		Reverse current per diode ⁽²⁾	I _R	V _R =70V	-	10
		V _R =100V	T _A =25°C T _A =125°C	- -	500 32	μA mA

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

2. Pulse test : Pulse width ≤ 40ms

PAN JI T RESERVES THE RIGHT TO IMPROVE PRODUCT DESIGN,FUNCTIONS AND RELIABILITY WITHOUT NOTICE



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RATINGS AND CHARACTERISTICS CURVES ($T_A=25^\circ\text{C}$ unless otherwise noted)

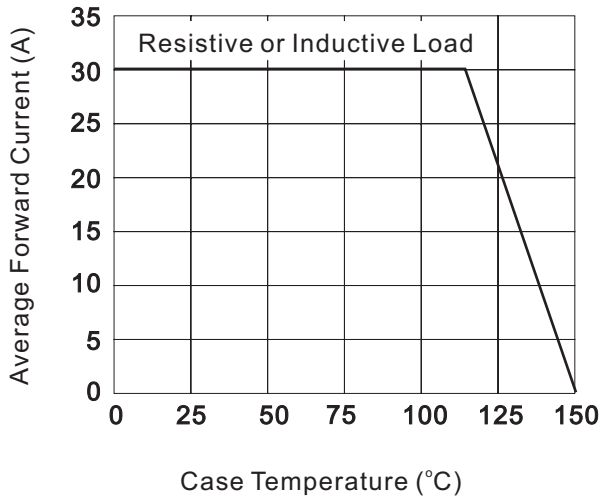


Figure 1. Forward Current Derating Curve

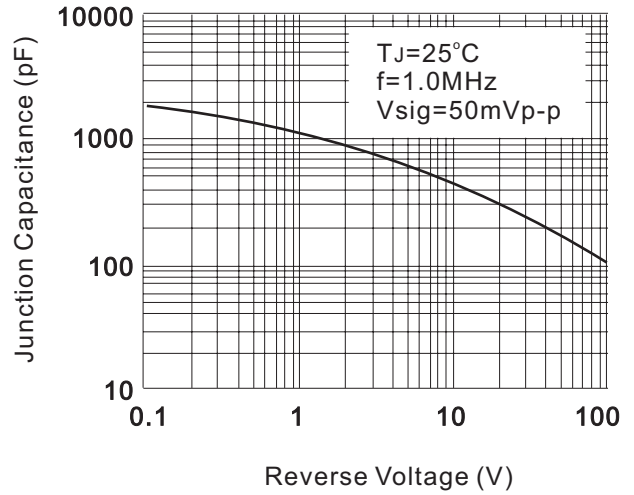


Figure 2. Typical Junction Capacitance

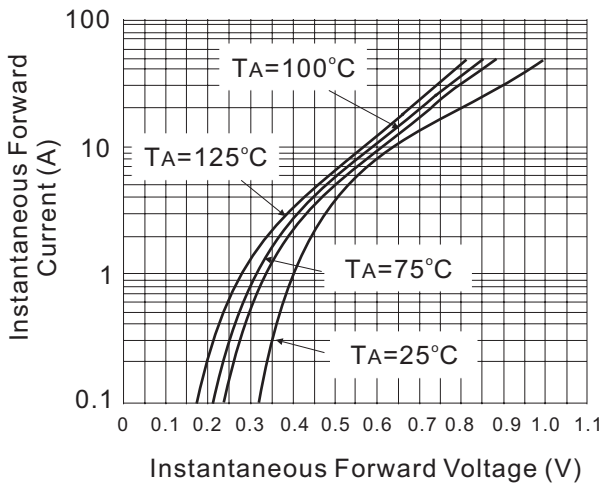


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

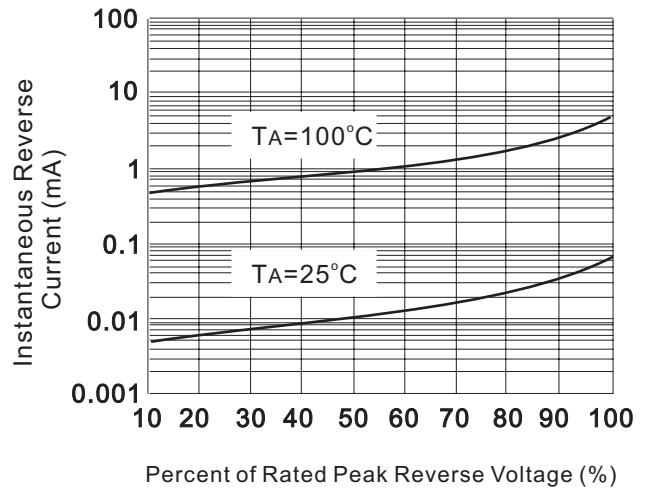


Figure 4. Typical Reverse Characteristics Per Diode