

SB3045LFCT

DUAL LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volts **CURRENT** 30 Amperes

FEATURES

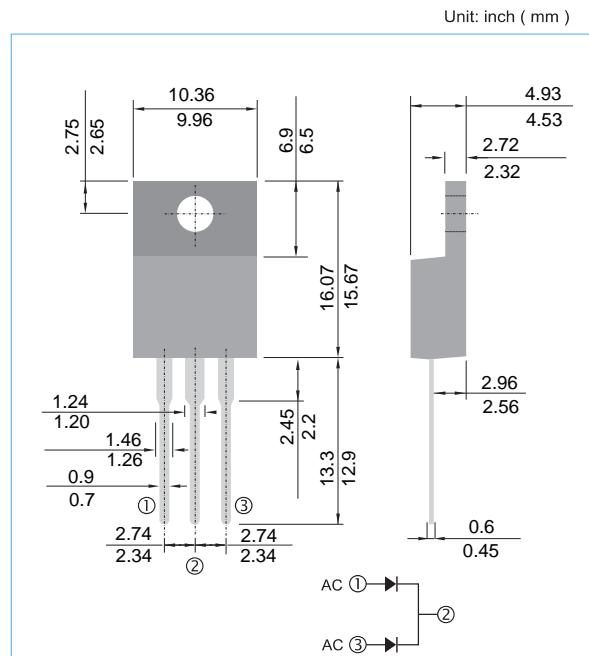
- Low forward voltage drop, low power losses
 - High efficiency operation
 - In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : ITO-220AB, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight: 0.055 ounces, 1.5615 grams.



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	45	V
Maximum average forward rectified current (Fig.3)	I _{F(AV)}	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	I _{FSM}	200	A
Typical thermal resistance	R _{θJC}	4.5	°C/W
Operating junction	T _J	-55 to + 125	°C
Storage temperature range	T _{STG}	-55 to + 125	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	$I_R=1\text{mA}$	50	-	-	V
Instantaneous forward voltage per diode ⁽¹⁾	V_F	$I_F=5\text{A}$ $T_J=25^\circ\text{C}$	-	0.42	0.46	V
		$I_F=10\text{A}$ $T_J=25^\circ\text{C}$	-	0.46	0.52	V
Reverse current per diode ⁽²⁾	I_R	$V_R=45\text{V}$ $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	-	100	500 10	uA mA

Note.1 Pulse test : 380μs pulse width, 1% duty cycle

2. Pulse test : Pulse width \leq 2.5ms

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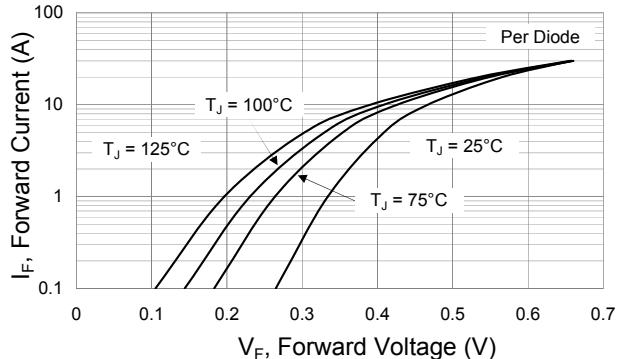


Fig.1 Typical Forward Characteristics

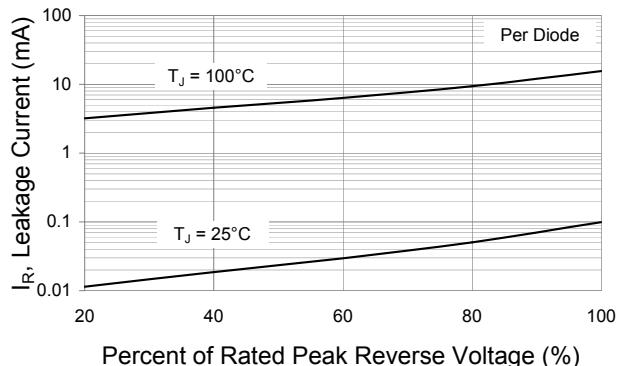


Fig.2 Typical Reverse Characteristics

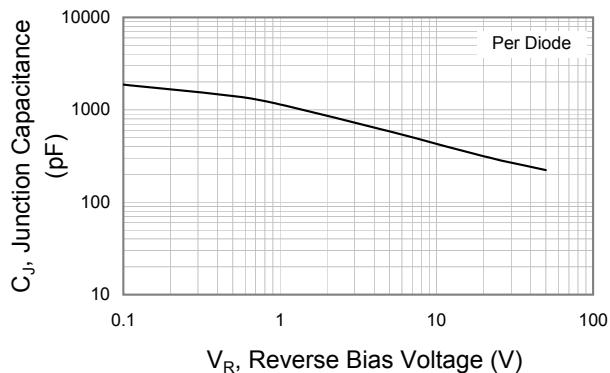


Fig.3 Typical Junction Capacitance

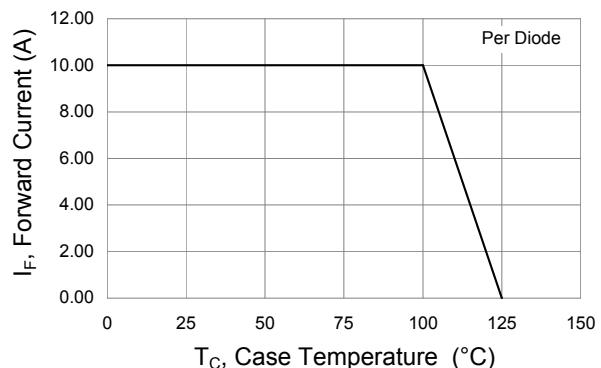


Fig.4 Forward Current Derating Curve