

SB3045LCT

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

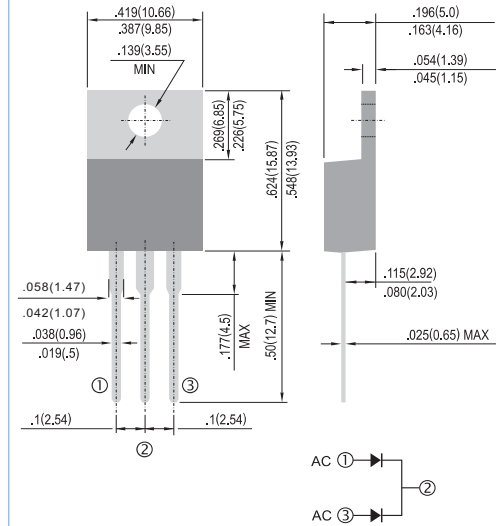
Case : TO-220AB, Plastic

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

Weight: 0.0655 ounces, 1.859 grams

TO-220AB

Unit: inch (mm)



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum average forward rectified current	$I_{F(AV)}$	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	I_{FSM}	250	A
Typical thermal resistance	$R_{\theta JC}$	2.5	$^{\circ}\text{C/W}$
Operating junction	T_J	-55 to + 125	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to + 150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	$I_R=1\text{mA}$	45	-	-	V
Instantaneous forward voltage per diode ⁽¹⁾	V_F	$I_F=15\text{A}$	-	-	0.53	V
		$I_F=30\text{A}$	-	-	0.72	V
		$I_F=15\text{A}$	-	0.42	0.50	V
		$I_F=30\text{A}$	-	0.59	0.67	V
Reverse current per diode ⁽²⁾	I_R	$V_R=60\text{V}$	-	-	0.4	mA
		$T_A=125^{\circ}\text{C}$	-	-	200	mA

Note : 1. Pulse test : $t_p \leq 380\mu\text{s}$, $\delta < 2\%$

2. Pulse test : Pulse width $\leq 2.5\text{ms}$

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

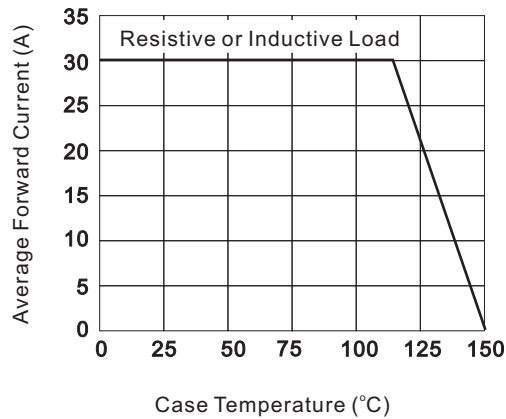


Figure 1. Forward Current Derating Curve

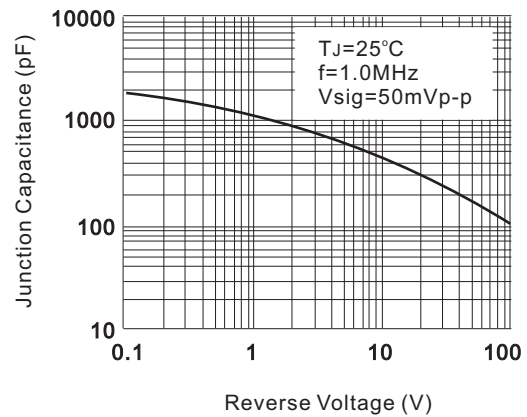


Figure 2. Typical Junction Capacitance

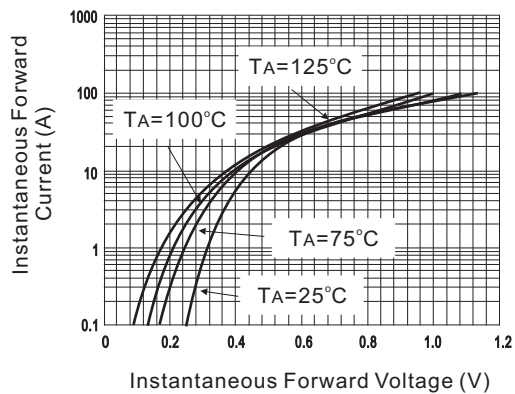


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

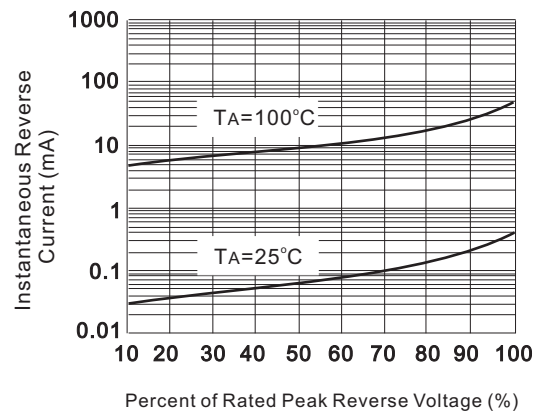


Figure 4. Typical Reverse Characteristics Per Diode