

SB40100LCT

Unit: inch (mm)

DUAL LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volts **CURRENT** 40 Amperes

FEATURES

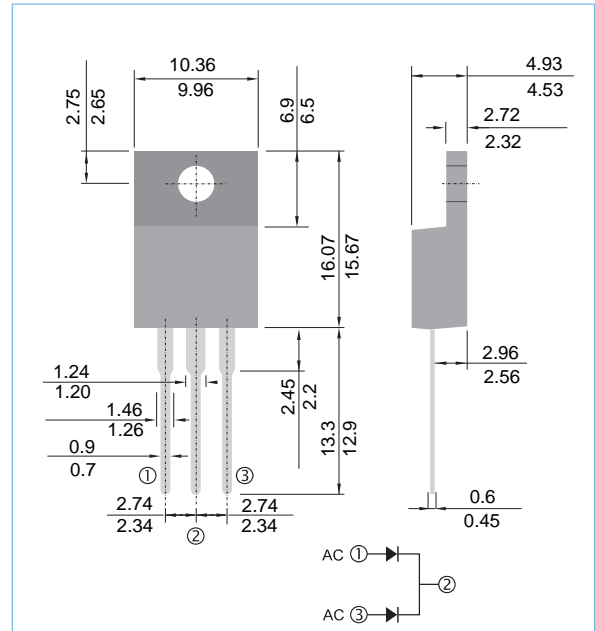
- Low forward voltage drop, low power losses
- High efficiency operation
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : TO-220AB, Plastic

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

Weight: 0.055 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}	100	V
Maximum average forward rectified current (Fig.3)	$I_{F(AV)}$	40 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	I_{FSM}	200	A
Typical thermal resistance	$R_{\theta JC}$	2.0	$^{\circ}\text{C/W}$
Operating junction	T_J	- 40 to + 150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	- 40 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 per diode	V_{BR}	$I_R=1.0\text{mA}$	103	120	-	V
Instantaneous forward voltage per diode ⁽¹⁾	V_F	$I_F=20\text{A}$ $T_J=25^{\circ}\text{C}$	-	-	0.80	V
		$I_F=20\text{A}$ $T_J=125^{\circ}\text{C}$	-	0.71	-	V
Reverse current per diode ⁽²⁾	I_R	$V_R=70\text{V}$	-	12	40	μA
		$V_R=100\text{V}$ $T_J=25^{\circ}\text{C}$	-	-	500	μA
		$V_R=100\text{V}$ $T_J=125^{\circ}\text{C}$	-	-	35	mA

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

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



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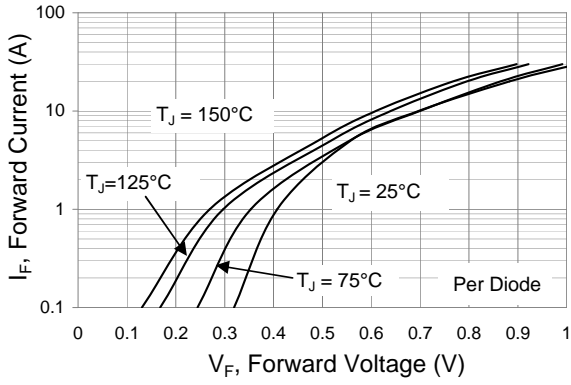


Fig.1 Typical Forward Characteristics

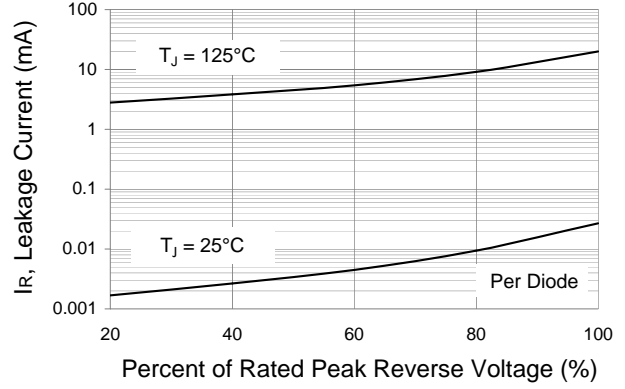


Fig.2 Typical Reverse Characteristics

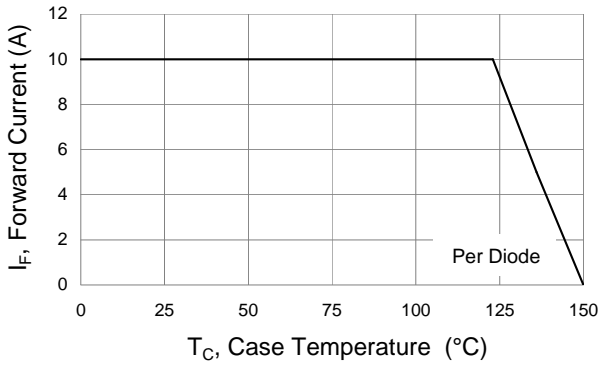


Fig.3 Forward Current Derating Curve

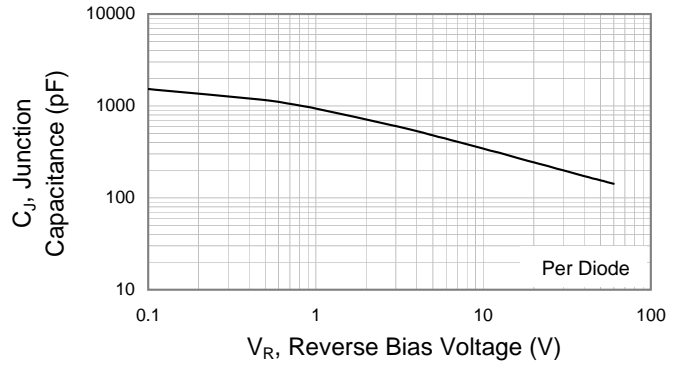


Fig.4 Typical Junction Capacitance