



# SB10100LFCT

## DUAL HIGH-VOLTAGE SCHOTTKY RECTIFIER

**VOLTAGE** 100 Volts **CURRENT** 10 Amperes

### FEATURES

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

### MECHANICAL DATA

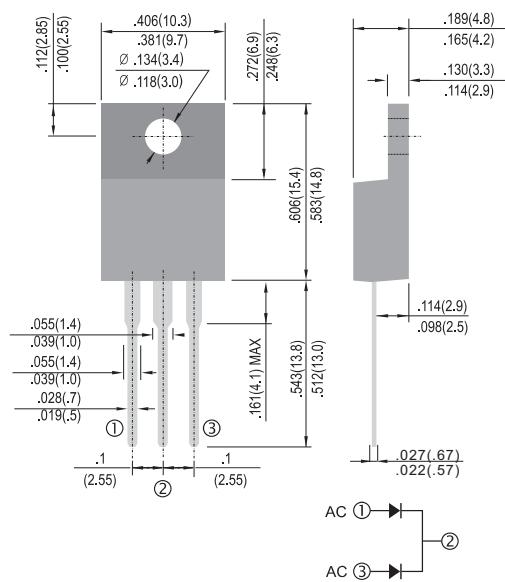
Case : ITO-220AB, Plastic

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

Weight: 0.055 ounces, 1.5615 grams

ITO-220AB

Unit: inch ( mm )



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
Maximum average forward rectified current (Fig.1) per device per diode	$I_{F(AV)}$	10 5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	$I_{FSM}$	125	A
Typical thermal resistance per diode	$R_{\Theta JC}$	5	$^\circ\text{C} / \text{W}$
Isolation voltage from terminal to heatsink $t=1\text{mm}$	$V_{AC}$	1500	V
Operating junction and storage temperature range	$T_J, T_{STG}$	-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	$V_{BR}$	$I_R=1\text{mA}$	103	120	-	V
Instantaneous forward voltage per diode <sup>(1)</sup>	$V_F$	$I_F=1\text{A}$ $I_F=5\text{A}$ $T_A=25^\circ\text{C}$	-	0.45 0.79	0.5	V
		$I_F=1\text{A}$ $I_F=5\text{A}$ $T_A=125^\circ\text{C}$	-	0.40 0.59	0.46	V
Reverse current per diode <sup>(2)</sup>	$I_R$	$V_R=70\text{V}$	-	8	-	$\mu\text{A}$
		$V_R=100\text{V}$ $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	-	16	100 30	$\mu\text{A}$ mA

Note.1.Pulse test : 300 $\mu\text{s}$  pulse width, 1% duty cycle

2.Pulse test used to minimize Self-Heating Effect

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



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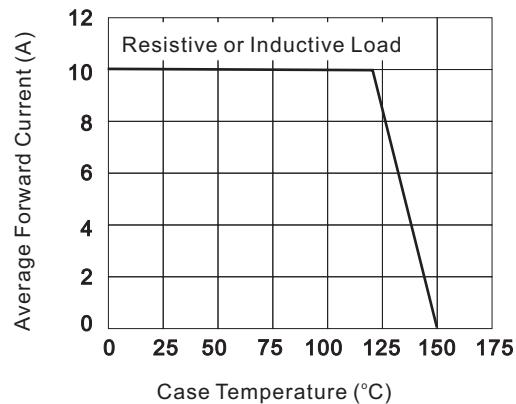


Figure 1. Forward Current Derating Curve

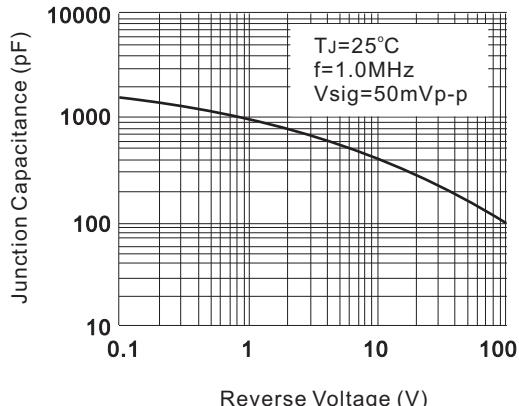


Figure 2. Typical Junction Capacitance

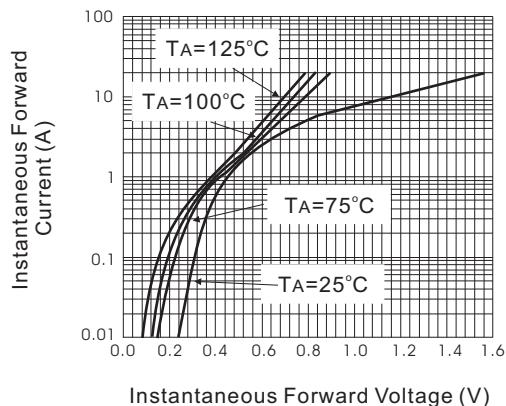


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

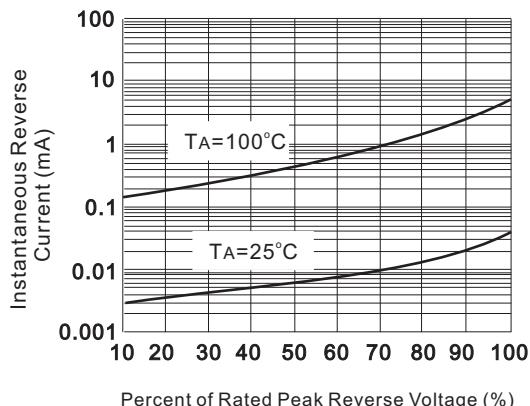


Figure 4. Typical Reverse Characteristics Per Diode