

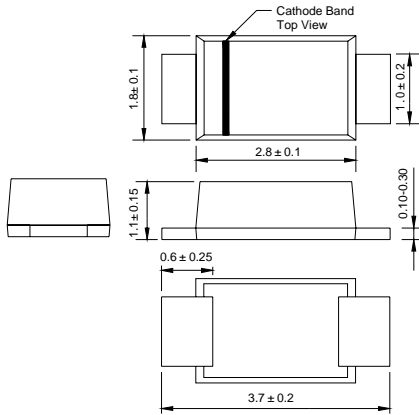


# SODDB3

## BIDIRECTIONAL TRIGGER DIODE

Reverse Voltage - 32 Volts Power: 150mW

### SOD-123FL



### FEATURES

- ◆ Small glass structure ensures high reliability
- ◆ VBO:28-36V version
- ◆ Low breakover current
- ◆ High temperature soldering guaranteed  
250°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

### MECHANICAL DATA

**Case:** JEDEC SOD-123FL molded plastic body  
**Terminals:** Solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any  
**Weight:** 0.0007 ounce, 0.02gram  
**Marking :** DB3

## MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	TEST CONDITION	SYMBOLS	VALUE			UNITS
			Min.	Typ.	Max.	
Breakover voltage *	C=22nF **	V <sub>BO</sub>	28	32	36	VOLTS
Breakover voltage symmetry	C=22nF **	+V <sub>BO1</sub> -I-V <sub>BO</sub>	-3		3	VOLTS
Dynamic breakover voltage *	(NOTE 1)	ΔV ± I	5			VOLTS
Output voltage *	DIAGRAM2	V <sub>O</sub>	5			VOLTS
Breakover current *	C=22nF **	I <sub>BO</sub>			100	μA
Rise time *	DIAGRAM3	tr		1.5		μS
Leakage current *	V <sub>R</sub> =0.5V <sub>BO</sub>	I <sub>B</sub>			10	μA
Power dissipation on printed circuit	T <sub>A</sub> =65°C	P <sub>d</sub>			150	mW
Repetitive peak on-state current	tp=20μs f=100HZ	I <sub>TRM</sub>			2	A
Thermal Resistances from Junction to ambient		R <sub>θJA</sub>			400	°C/W
Thermal Resistances from Junction to lead		R <sub>θJL</sub>			150	
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-40		125	°C

\* :Electrical characteristic appoicaboe in forward and reverse directions.

\*\* :Connected in parallel with the devices.

Note 1:I<sub>BO</sub> from I<sub>BO</sub> to 10mA



# RATINGS AND CHARACTERISTIC CURVES SODDB3

DIAGRAM 1: CURRENT-VOLTAGE CHARACTERISTICS

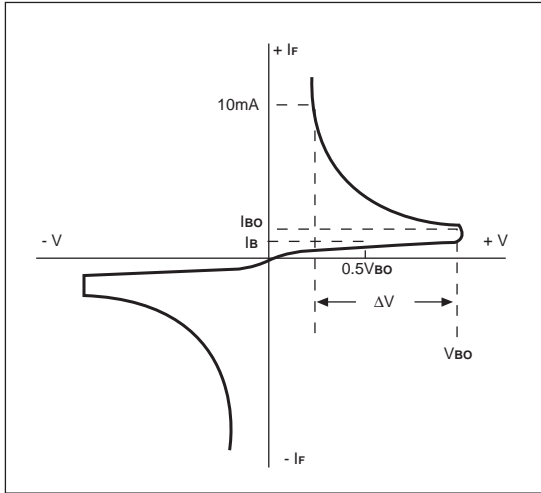


DIAGRAM 2: TEST CIRCUIT OUTPUT VOLTAGE

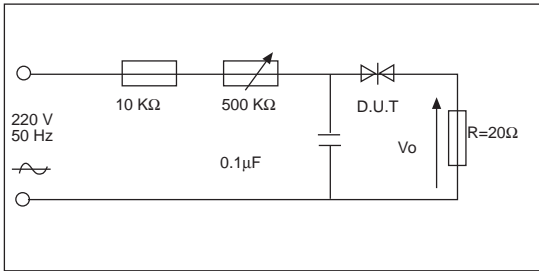


DIAGRAM 3: TEST CIRCUIT SEE DIAGRAM 2. ADJUST R FOR  $I_p=0.5A$

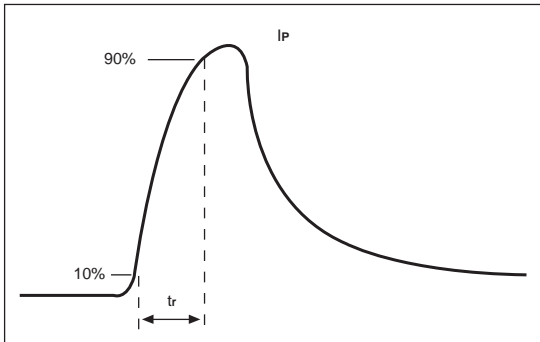


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

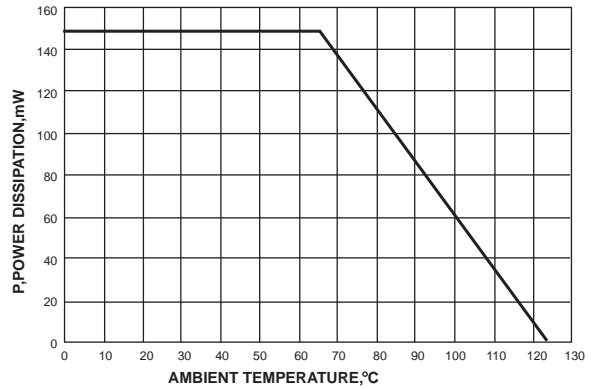


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

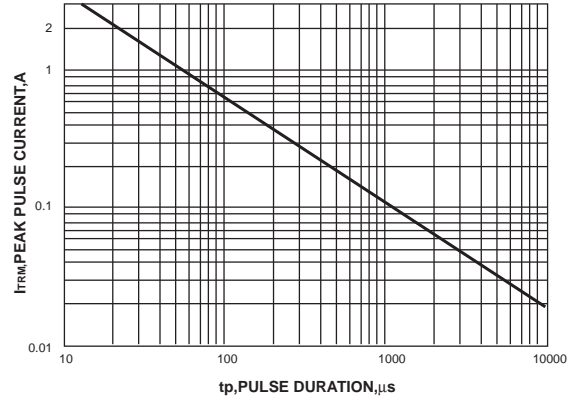
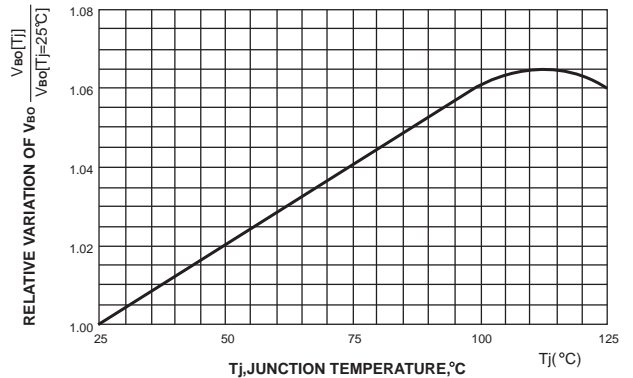


FIG. 3-RELATIVE VARIATION OF  $V_{Bo}$  VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

