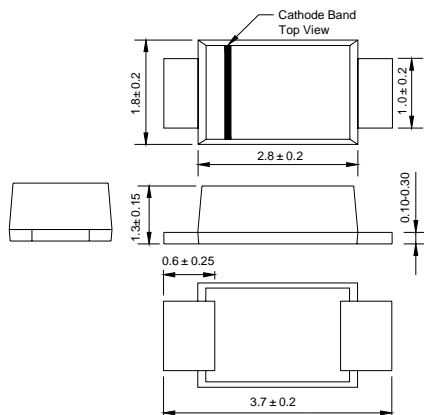


# DSDB3

## BIDIRECTIONAL TRIGGER DIODE

Reverse Voltage - 32 Volts Power: 150mW

### SOD-123FL



Dimensions in millimeters

### 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 **	$V_{BO}$	28	32	36	VOLTS
Breakover voltage symmetry	C=22nF **	$ +V_{BO}  -  -V_{BO} $	-3		3	VOLTS
Dynamic breakover voltage *	(NOTE 1)	$  \Delta V_{\pm}  $	5			VOLTS
Output voltage *	DIAGRAM2	$V_o$	5			VOLTS
Breakover current *	C=22nF **	$I_{BO}$			100	$\mu A$
Rise time *	DIAGRAM3	$t_r$		1.5		$\mu S$
Leakage current *	$V_R=0.5V_{BO}$	$I_B$			10	$\mu A$
Power dissipation on printed circuit	$T_A=65^{\circ}C$	$P_d$			150	mW
Repetitive peak on-state current	$t_p=20\mu s$ $f=100Hz$	$I_{TRM}$			2	A
Thermal Resistances from Junction to ambient		$R_{\theta JA}$			400	$^{\circ}C/W$
Thermal Resistances from Junction to lead		$R_{\theta JL}$			150	$^{\circ}C/W$
Operating junction and storage temperature range		$T_J, T_{STG}$	-40		125	$^{\circ}C$

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

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

Note 1:  $I_{BO}$  from  $I_{BO}$  to 10mA

# RATINGS AND CHARACTERISTIC CURVES DSDB3

DIAGRAM 1: CURRENT-VOLTAGE CHARACTERISTICS

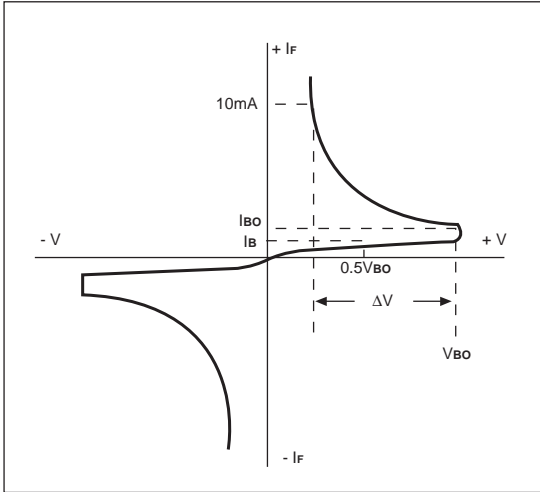


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

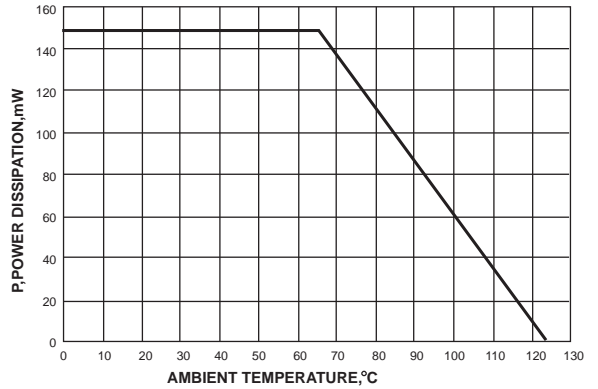


DIAGRAM 2: TEST CIRCUIT OUTPUT VOLTAGE

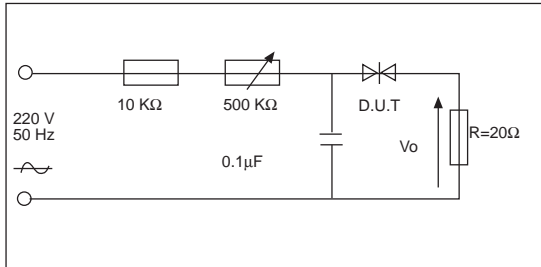


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

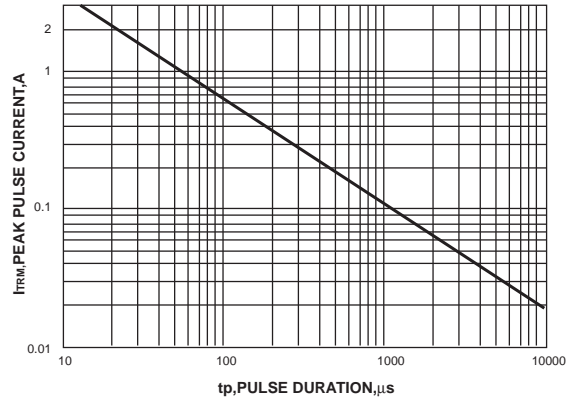


DIAGRAM 3: TEST CIRCUIT SEE DIAGRAM 2. ADJUST R FOR  $I_P=0.5A$

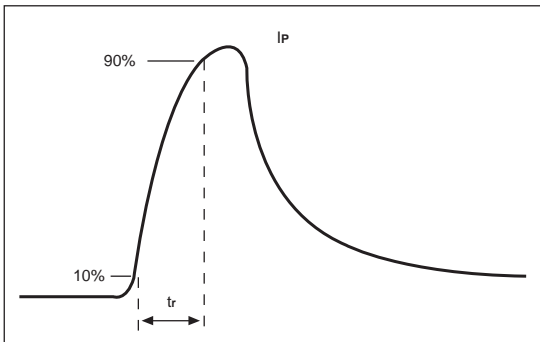


FIG. 3-RELATIVE VARIATION OF  $V_{Bo}$  VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

