



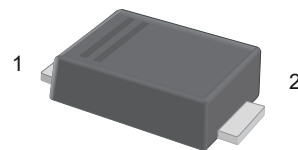
DB3FL~DB4FL

Silicon Bidirectional Trigger Diodes

Features

- These diacs are intended for use in thyristor phase control. circuits for lamp-dimming. universal-motor speed controls. and heat controls.

SOD-123FL



1.Cathode  2.Anode

Marking Code :

DB3FL : DB3W
DC34FL : DC34W
DB4FL : DB4W

Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$)

Parameter	Symbols	Value	Unit
Power dissipation ($T_C=100^\circ\text{C}$)	P_D	150	mW
Repetitive Peak On-state Current ($t_p = 20 \mu\text{s}$, $f = 100 \text{ Hz}$)	I_{TRM}	2	A
Operating Junction Temperature Range	T_J	-45 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-45 to +125	$^\circ\text{C}$

Characteristics ($T_A = 25^\circ\text{C}$)

Parameter		Symbols	Min.	Max.	Unit
Breakover Voltage At $C = 22 \text{ nF}$, see diagram 1	DB3FL	V_{BO}	28	36	V
	DC34FL		30	38	V
	DB4FL		35	45	V
Breakover Voltage Symmetry at $C = 22 \text{ nF}$, see diagram 1		$[+V_{BO} - -V_{BO}]$	--	3	V
Dynamic Breakover Voltage at $\Delta I = [I_{BO} \text{ to } I_F = 10 \text{ mA}]$		$ \Delta V \pm $	5	--	V
Output Voltage See diagram 2		V_O	5	--	V
Breakover Current at $C = 22 \text{ nF}$		I_{BO}	--	50	μA
Leakage Current at $V_B=0.5V_{BOmax}$		I_B	--	10	μA
Rise Time See diagram 3		t_r	--	2	μs



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Typical Characteristic Curves

Diagram1: current-voltage characteristic

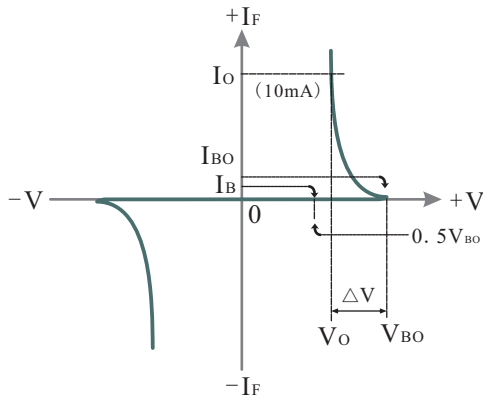


Fig.1

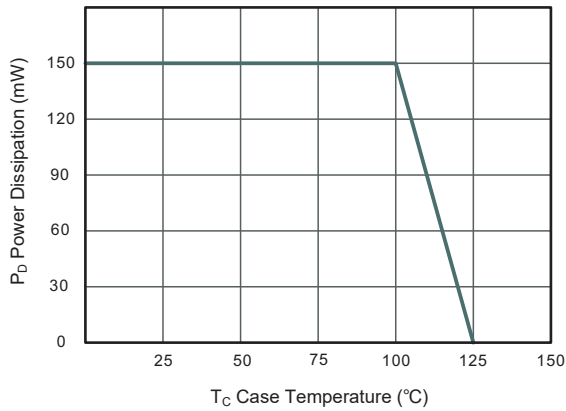


Fig.3

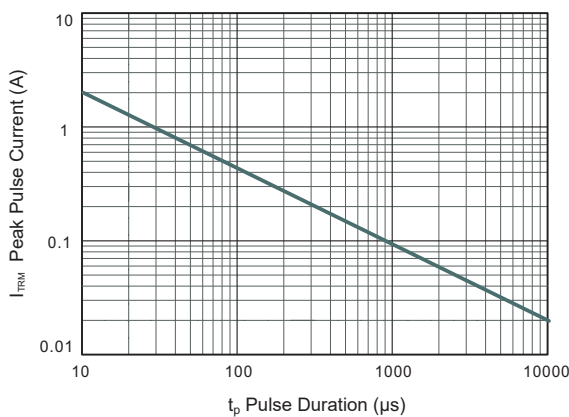


Diagram2: Test circuit for output voltage

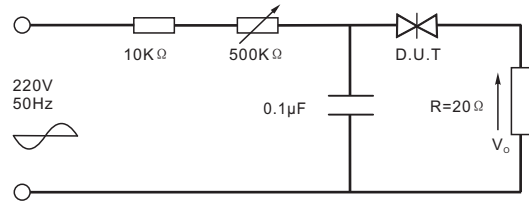


Diagram3: Test circuit see Fig.2. Adjust R for I_p=0.5A

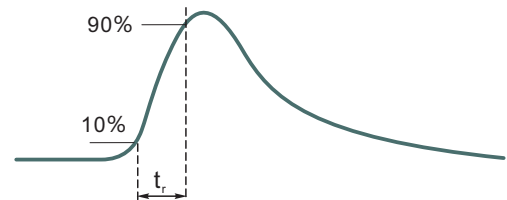
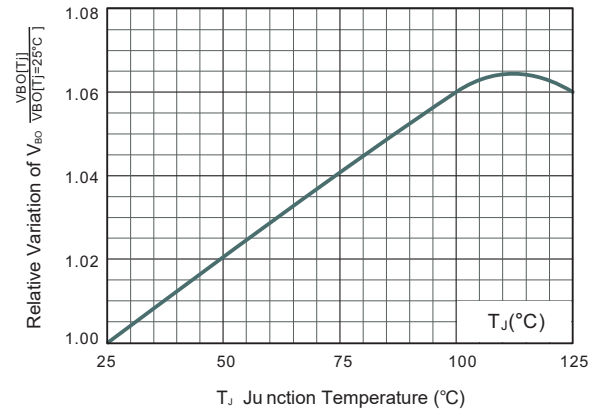


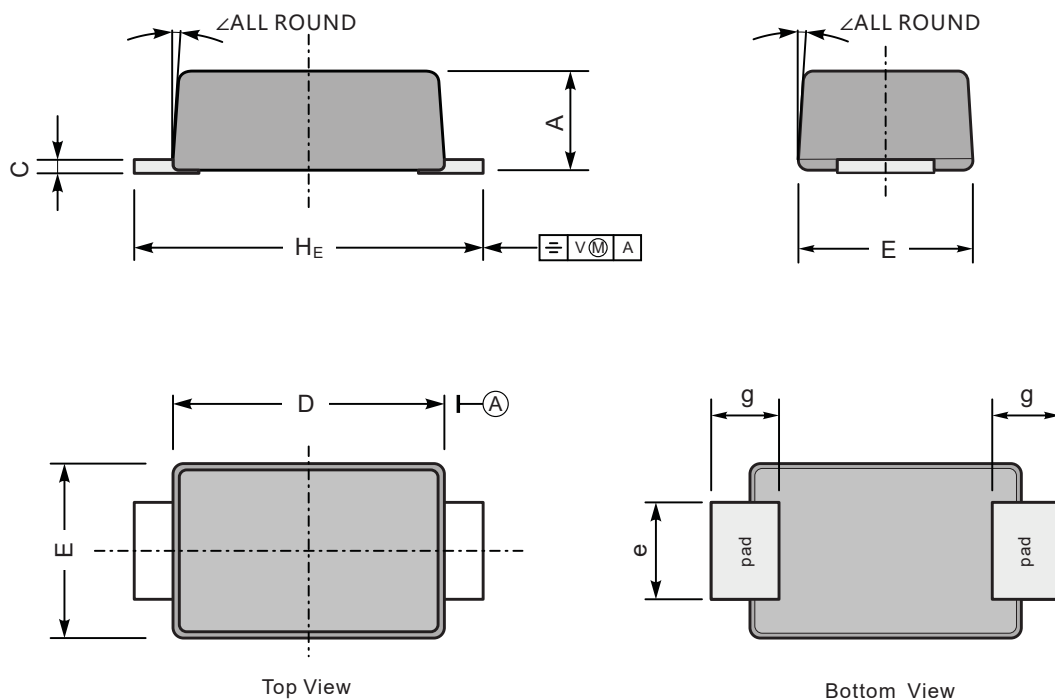
Fig.2



Package Outline

SOD-123FL

Dimensions in mm



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	