GOODWORK

DB3W / DC34W / DB4W

Silicon Bidirectional Trigger Diodes

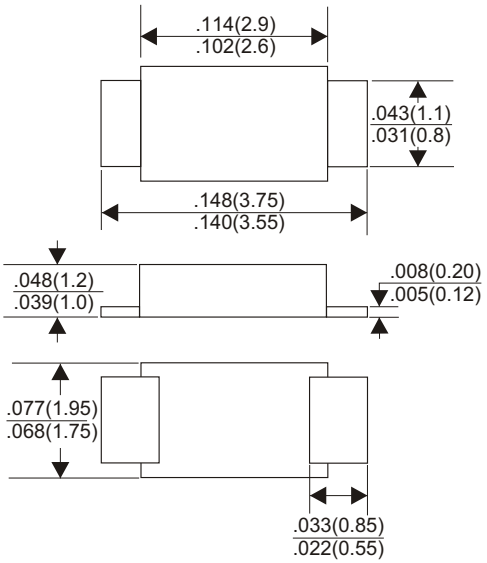
FEATURES

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

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:15mg 0.00048oz

SOD123FL



Dimensions in inches and (millimeters)

Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Unit
Power Dissipation (T_c = 100°C)	P_{tot}	150	mW
Repetitive Peak On-state Current (tp = 20 µs, f = 100 Hz)	I_{TRM}	2	A
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 40 to + 125	°C

DB3W / DC34W / DB4W

Characteristics at T_a = 25°C

Parameter		Symbol	Min.	Max.	Unit
Breakover Voltage at C = 22 nF, see diagram 1	DB3W	V_{BO}	28	36	V
	DC34W		30	38	V
	DB4W		35	45	V
Breakover Voltage Symmetry at C = 22 nF, see diagram 1		$[\|+V_{BO}\|-\|-V_{BO}\|]$	—	3	V
Dynamic Breakover Voltage at $\triangle I = [I_{BO}$ to $I_F = 10$ mA]		$\| \triangle V \pm \|$	5	—	V
Output Voltage See diagram 2		V_O	5	—	V
Breakover Current at C = 22 nF		I_{BO}	—	50	μA
Leakage Current at $V_B=0.5V_{BO}$max		I_B	—	10	μA
Rise Time See diagram 3		t_r	—	2	μs

RATING AND CHARACTERISTIC CURVES (DB3W/DC34W/DB4W)

Diagram1: current-voltage characteristice

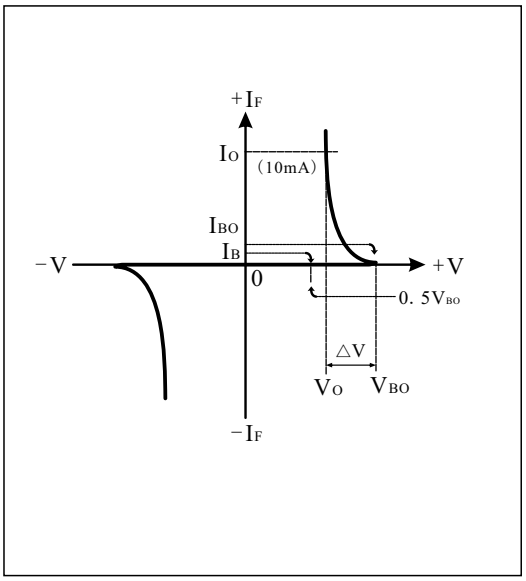


Diagram2: Test circuit for output voltage

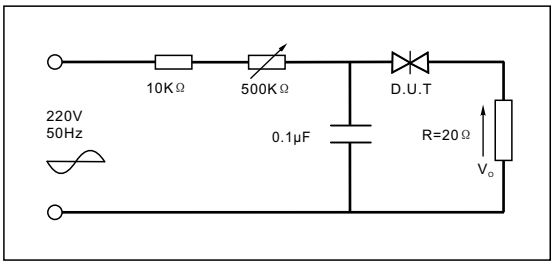


Diagram3: Test circuit see Fig.2. Adjust R for Ip=0.5A

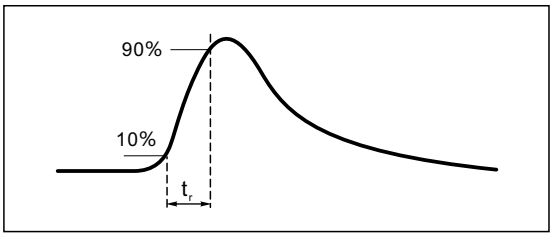


Fig.1: Power dissipation versus ambient temperapture(maximum values)

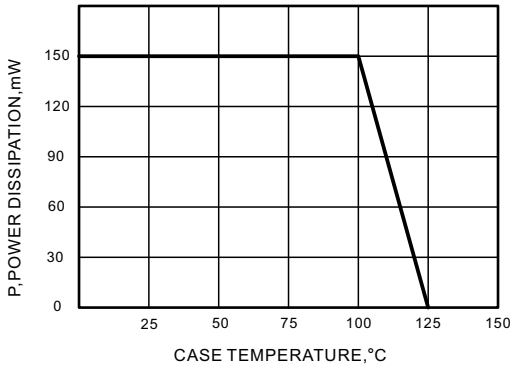


Fig.2: Power dissipation versus ambient temperapture(maximum values)

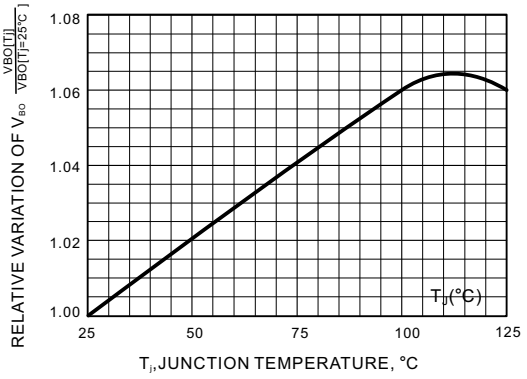


Fig.3: Power dissipation versus ambient temperapture(maximum values)