

/ Descriptions

SOD-123FL

Silicon Bidirectional Trigger Diodes, SOD-123FL thin package。

/ Features

Use in thyristor phase control,circuits for lamp-dimming,universal-motor speed controls,and heat controls.Halogen free product.

/ Applications

General purpose.

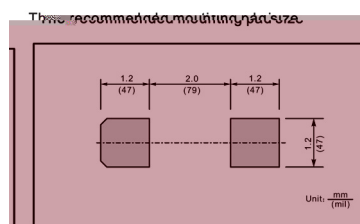
/ Equivalent Circuit



/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Power Dissipation (T _C =100℃)	P _{tot}	150	mW
Repetitive Peak On-state Current (tp=20us, f=100Hz)	I _{TRM}	2	A
Operating Junction and Storage Temperature Range	T _j T _{stg}	-40 to +125	℃

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions		Min	Max	Unit
Breakover Voltage	V _{BO}	C=22nF see diagram 1	DB3W	28	36	V
			DC34W	30	38	V
			DB4W	35	45	V
Breakover Voltage Symmetry	[+V _{BO} - - V _{BO}]	C=22nF see diagram 1		—	3	V
Dynamic Breakover Voltage	ΔV±	ΔI=[I _{BO} to I _F =10mA]		5	—	V
Output Voltage	V _O	See diagram 2		5	—	V
Breakover Current	I _{BO}	C=22nF		—	50	uA
Leakage Current	I _B	V _B =0.5 V _{BO} max		—	10	uA
Rise Time	t _r	See diagram 3		—	2	us

/ Electrical Characteristic Curve

Diagram1: current-voltage characteristic

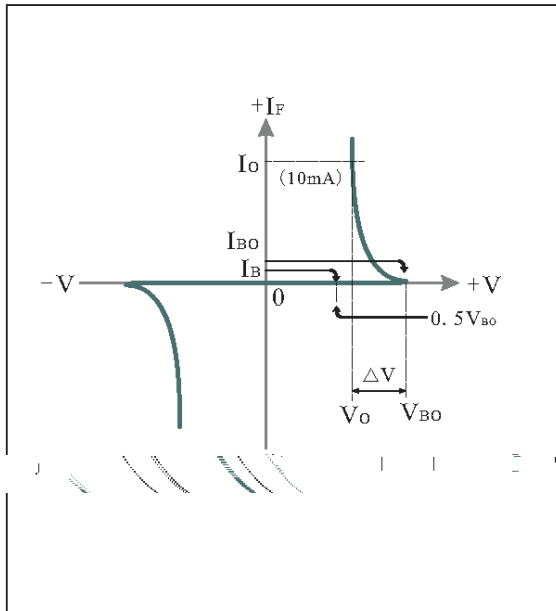


Diagram2: Test circuit for output voltage

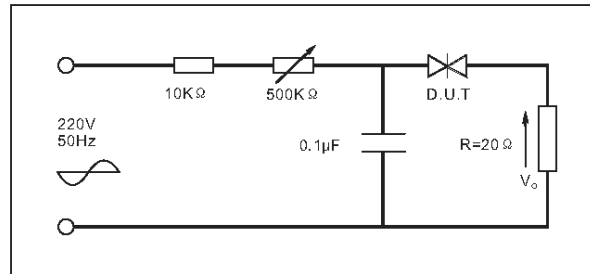
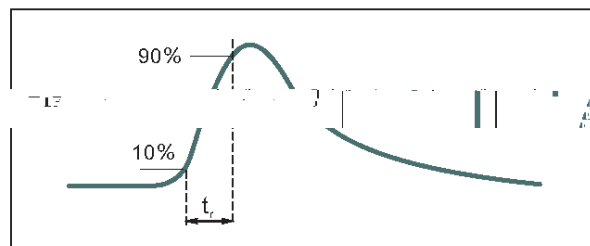
Diagram3: Test circuit see Fig.2. Adjust R for $I_p=0.5A$ 

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

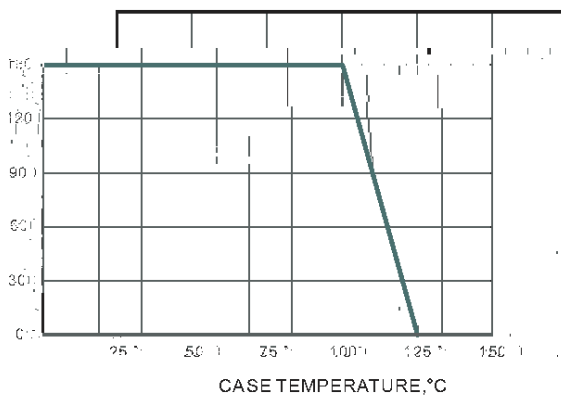


Fig.2: Power dissipation versus ambient temperature(maximum values)

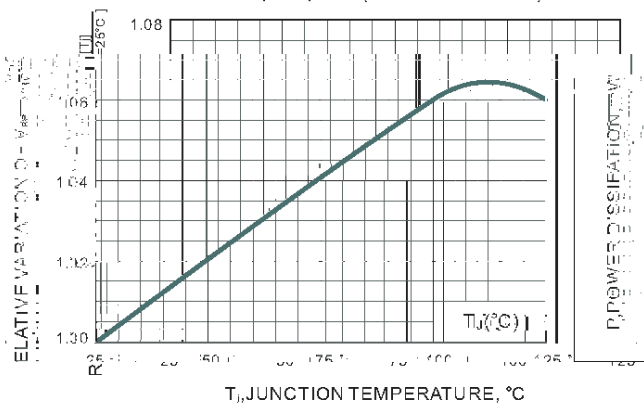
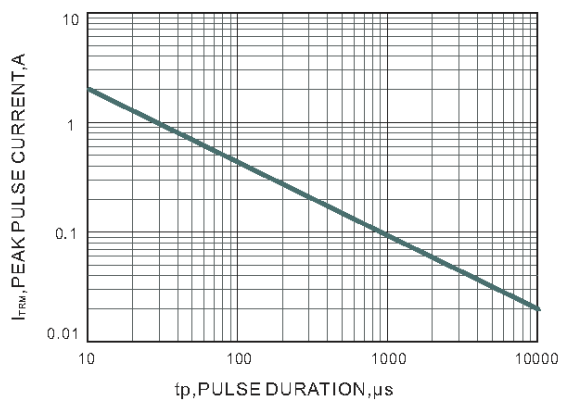
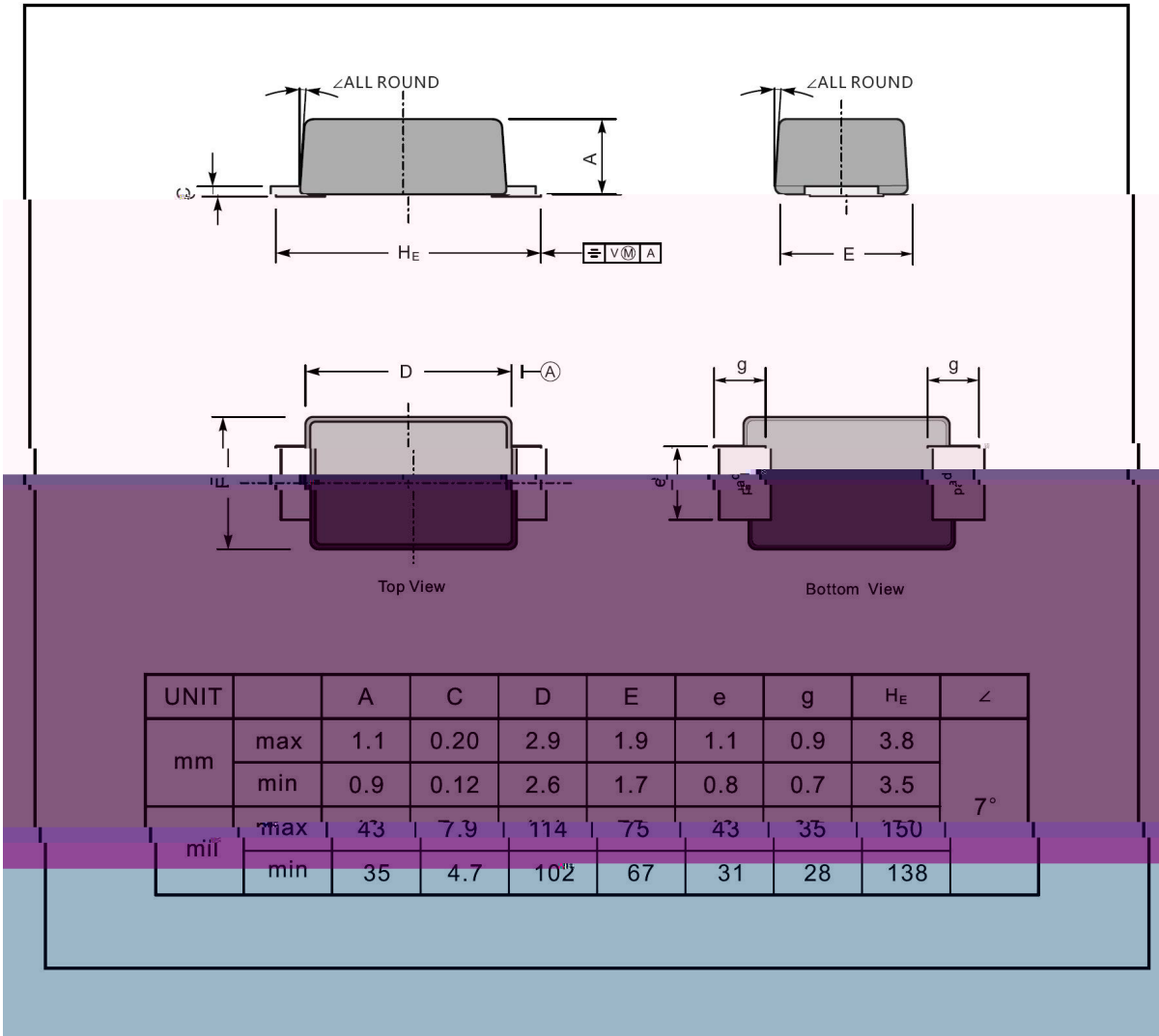


Fig.3: Power dissipation versus ambient temperature(maximum values)



/ Package Dimensions

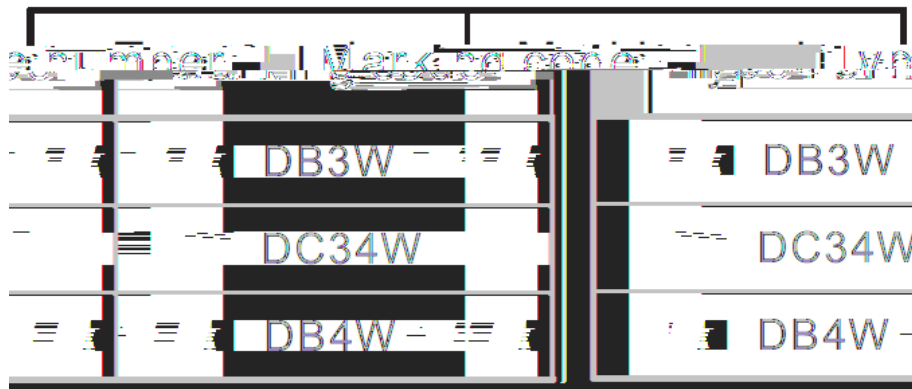
SOD-123FL



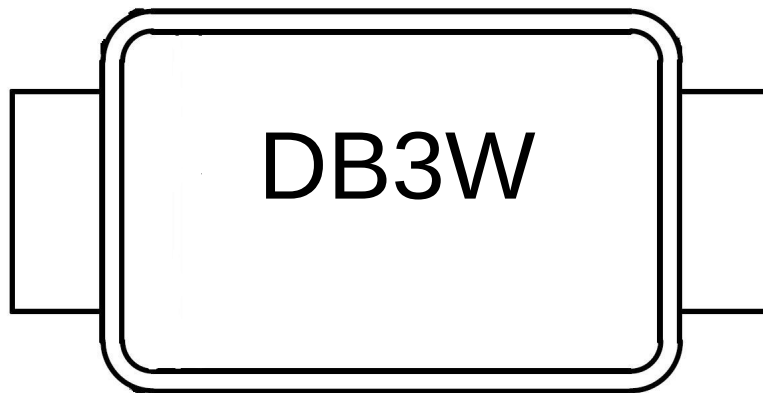


/ Marking Instructions

Marking



/ Marking Instructions



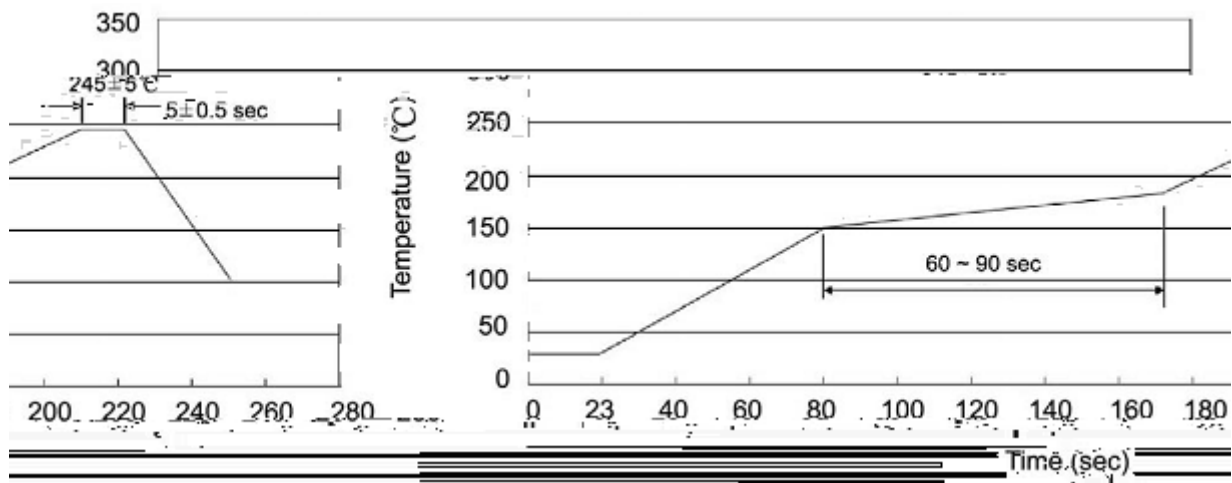
Note:

Product Type Code

Lot No. Code The 1st "*" means:YM Code The last 3 "*" means:little Lot

No Code

() /



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , Time:60~90sec.
- 2

245 5

5 0.5sec;

2.Peak Temp.:245 5 , Duration:5 0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260 5 Time:10 1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOD-123FL	3000	8	24000	5	120000	7" ×11	185X180X105	390X385X205

/ Notices