

/ Descriptions

50V~600V

1.0A

SOD-123FL

Surface Mount Superfast Recovery Rectifiers, Reverse Voltage 50 to 600V, Forward Current 1.0A, SOD-123FL thin package.

/ Features

RoHS

2011/65/EU

Superfast recovery times for high efficiency, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications. Halogen free product.

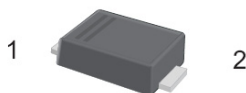
/ Applications

General purpose.

/ Equivalent Circuit

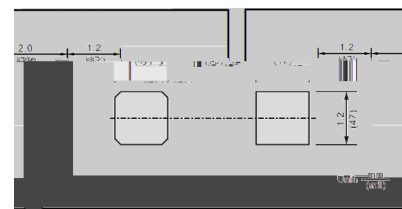


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

—The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		ES1AW	ES1BW	ES1CW	ES1DW	ES1EW	ES1GW	ES1JW	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at $T_L = 100$	$I_{F AV}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Typical Junction Capacitance at $V_R=4V$, $f=1MHz$	C_j	10							pF
Typical Thermal Resistance ¹	$R_{\theta JA}$	120							/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							

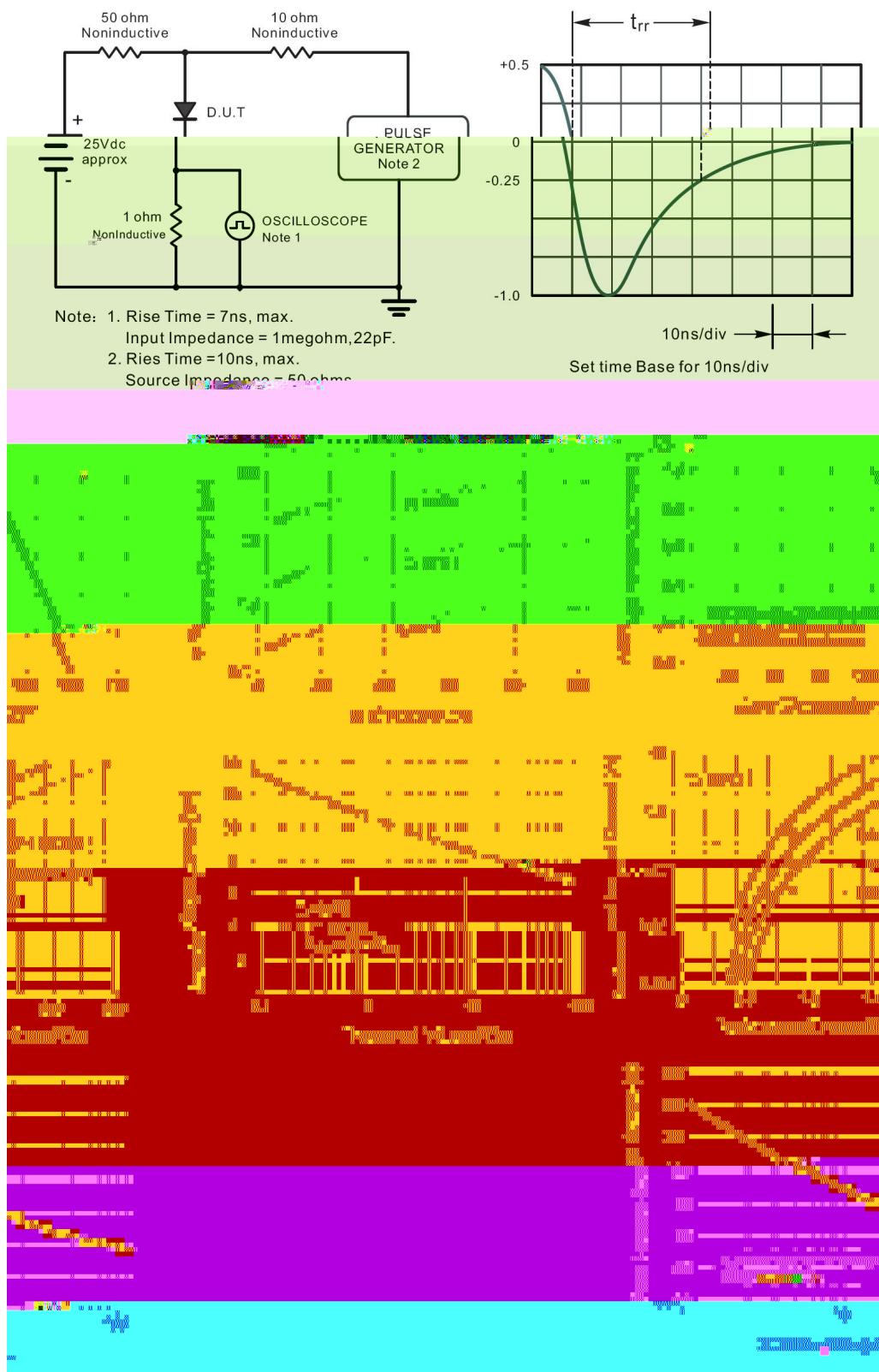
Note:

1 P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

/ Electrical Characteristics(Ta=25)

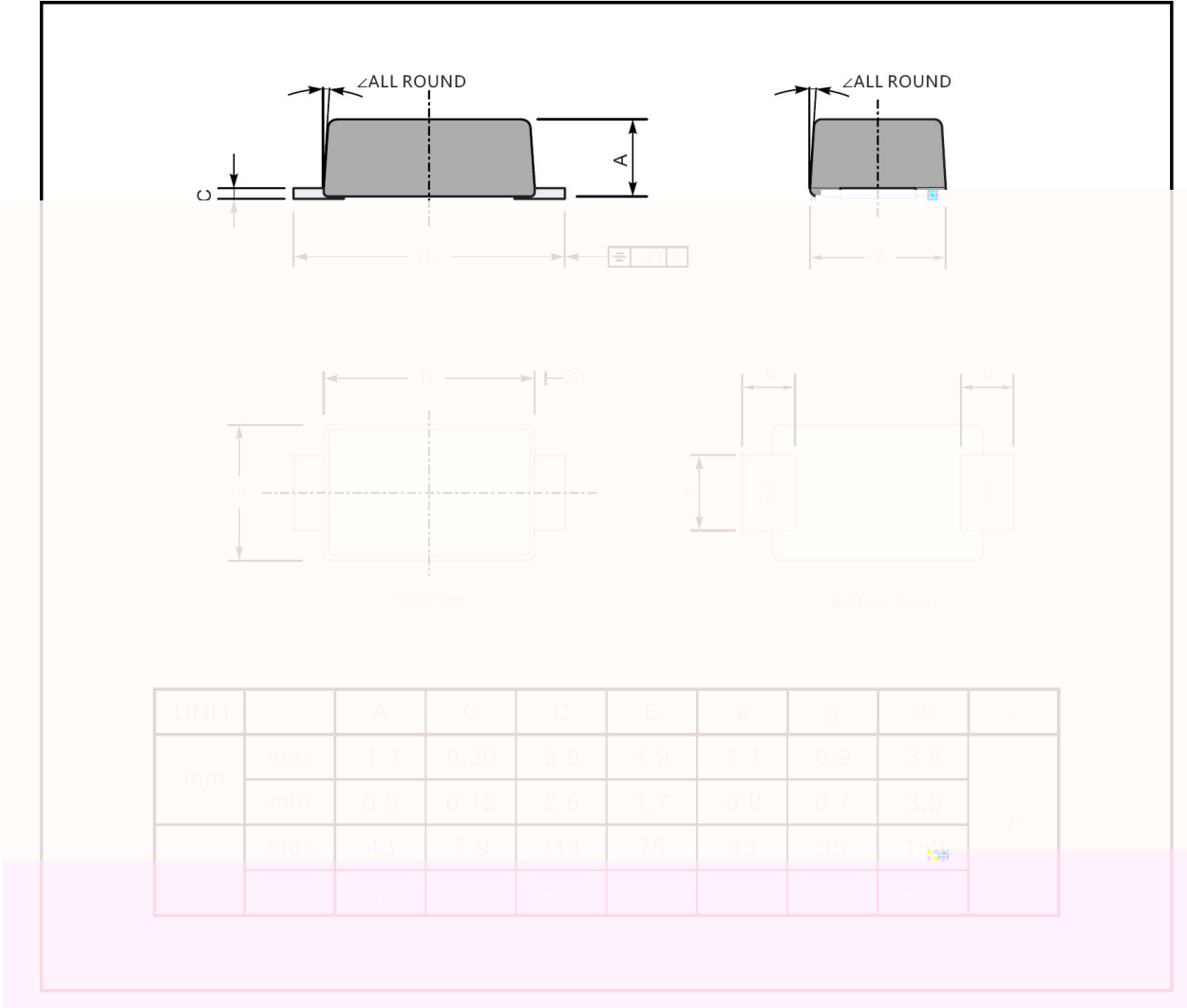
Parameter	Symbol	Test Conditions	Rating							Unit
			ES1AW	ES1BW	ES1CW	ES1DW	ES1EW	ES1GW	ES1JW	
Maximum Forward Voltage	V _F	I _F =1.0A	1.0				1.25		1.68	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I _R	T _a =25	5.0							μA
		T _a =125	100							μA
Maximum Reverse Recovery Time	T _{rr}	I _F =0.5A I _R =1A I _{rr} =0.25A	35							ns

/ Electrical Characteristic Curve



/ Package Dimensions

SOD-123FL



/ Marking Instructions

Marking

Type number	Marking code
ES1AW	ESL
ES1BW	
ES1CW	
ES1DW	
ES1EW	ESM
ES1GW	
ES1JW	ESH

/ Marking Instructions



ESL

1

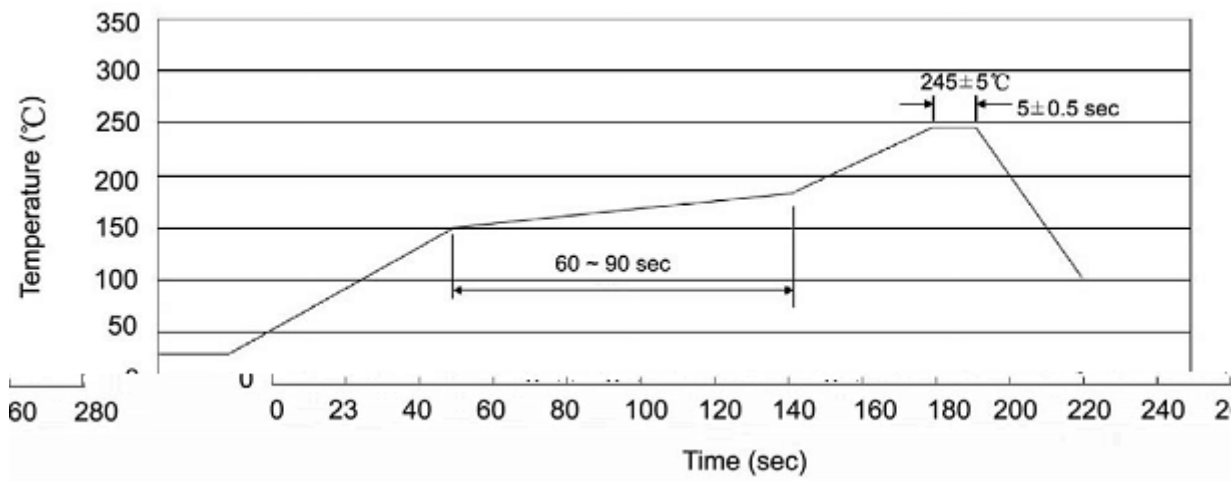
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Note:

ESL 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;
- 2

245±5

5±0.5sec;
- 3

2 10 /sec.
- 1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

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