

/ 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.

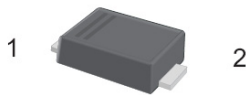
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode



/ 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 TL = 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 VR=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							

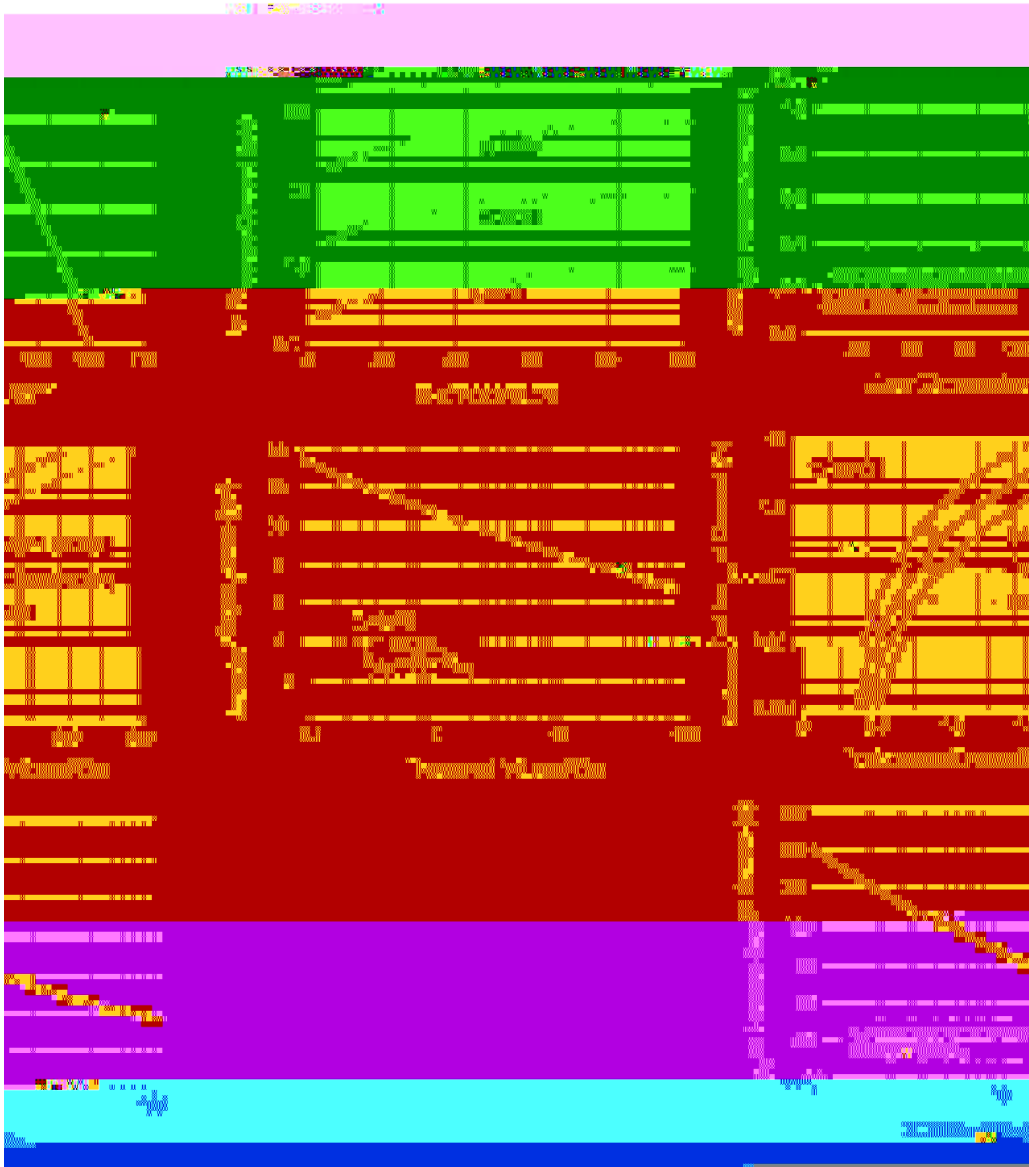
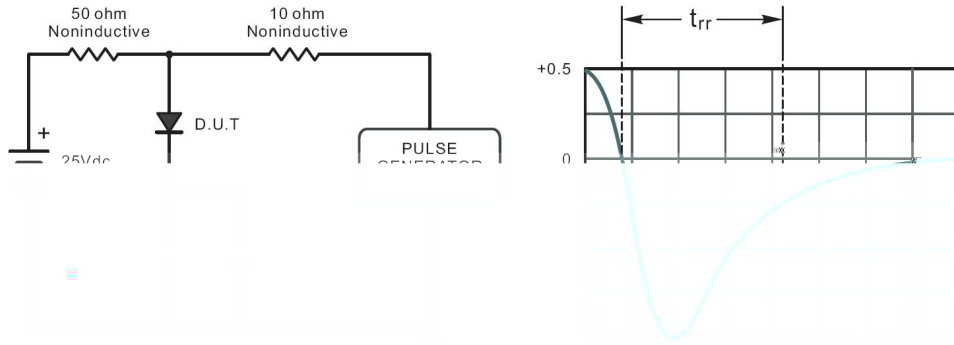
Note:

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

/ Electrical Characteristics(Ta=25)

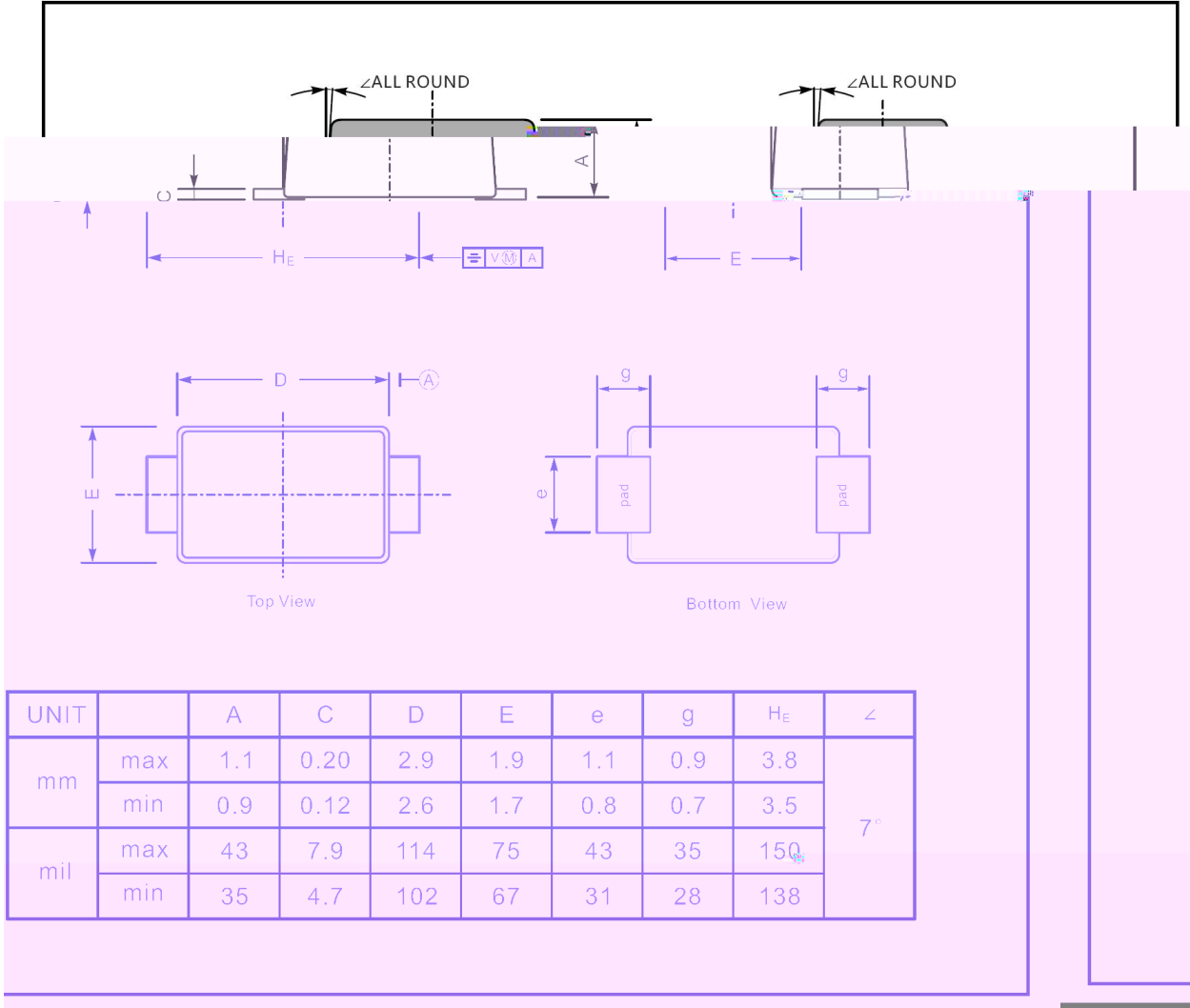
Parameter	Symbol	Test Conditions	Rating						Unit
			ES1AW	ES1BW	ES1CW	ES1DW	ES1EW	ES1GW	
Maximum Forward Voltage	V_F	$I_F=1.0A$	1.0			1.25		1.68	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	$T_a=25$	5.0						μA
		$T_a=125$	100						μA
Maximum Reverse Recovery Time	T_{rr}	$I_F=0.5A$ $I_R=1A$ $I_{rr}=0.25A$	35						ns

/ Electrical Characteristic Curve



/ Package Dimensions

SOD-123FL

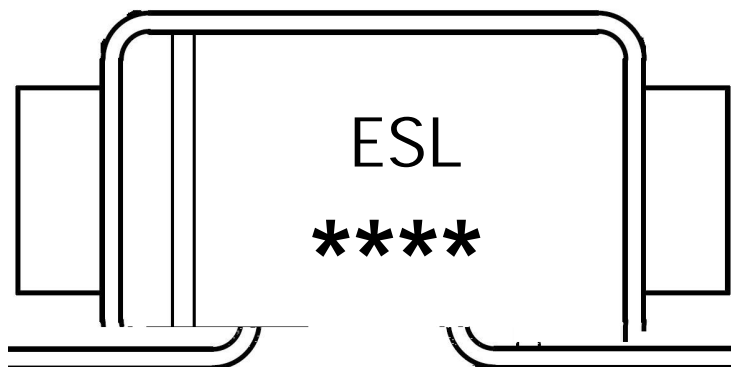


/ Marking Instructions

Marking

Type number	Marking code
ES1AW ^{CM}	
ES1PW	

/ Marking Instructions



ESL

1 *

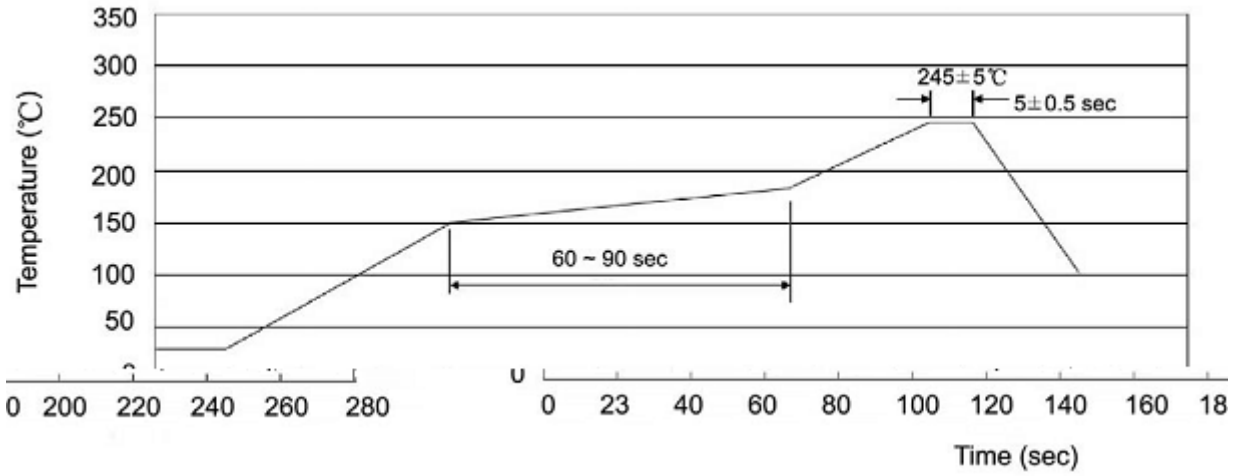
3 *

Note:

ESL Product Type Code

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

() / Temperature Profile for IR Reflow Soldering (Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-------|--------|--|
| 1 | 25 | 150 | 60 | 90sec; | 1. Preheating: 25~150 , Time: 60~90sec. |
| 2 | 245±5 | | 5±0.5 | sec; | 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)		
	只卷盘	卷盘盒	只盒	盒箱	只箱		盒	箱
SOD-123FL	3000	8	24000	5	120000	7 x11	185X180X105	390X385X205

/ Notices