

修订记录 / Revised record

[illegible]

描述 / Descriptions

50V~600V 1.0A SMA
Surface Mount Superfast Recovery Rectifier,Reverse Voltage:50 to600V,Forward Current:1.0A, SMA package.

特征 / Features

RoHS 2011/65/EU
Glass Passivated Chip Junction, Superfast reverse recovery time, Lead free in comply with EU R0HS 2011/65/EU directives, For surface mounted applications.Halogen free product.

用途 / Applications

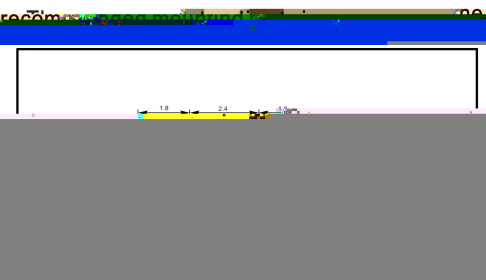
General purpose.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning

1		2	PIN	DESCRIPTION
			1	



印章代码 / Marking

See Marking Instructions

极限参数 / Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating							Unit
		ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	
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	$I_F (AV)$	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	15							pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	75							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

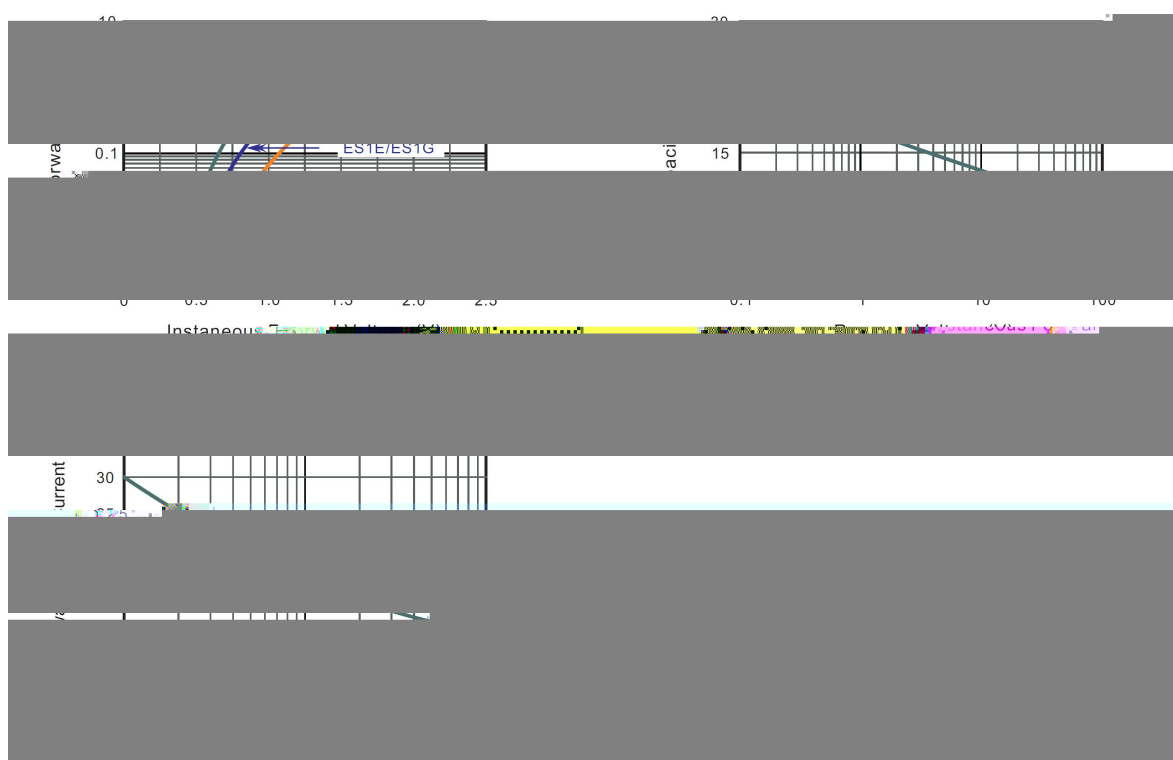
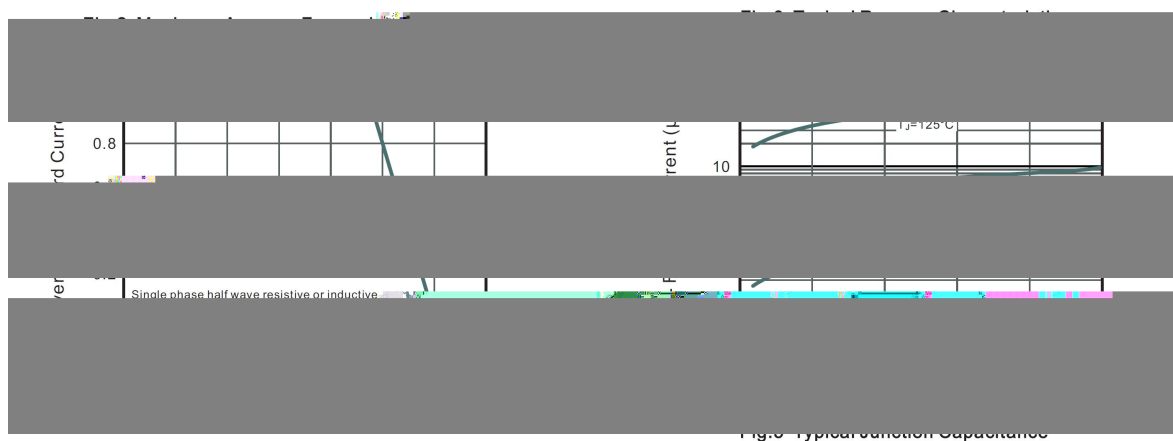
Note:

1) P.C.B. mounted with 1.0X1.0"(2.54X2.54 cm) copper pad areas.

电性能参数 / Electrical Characteristics(Ta=25°C)

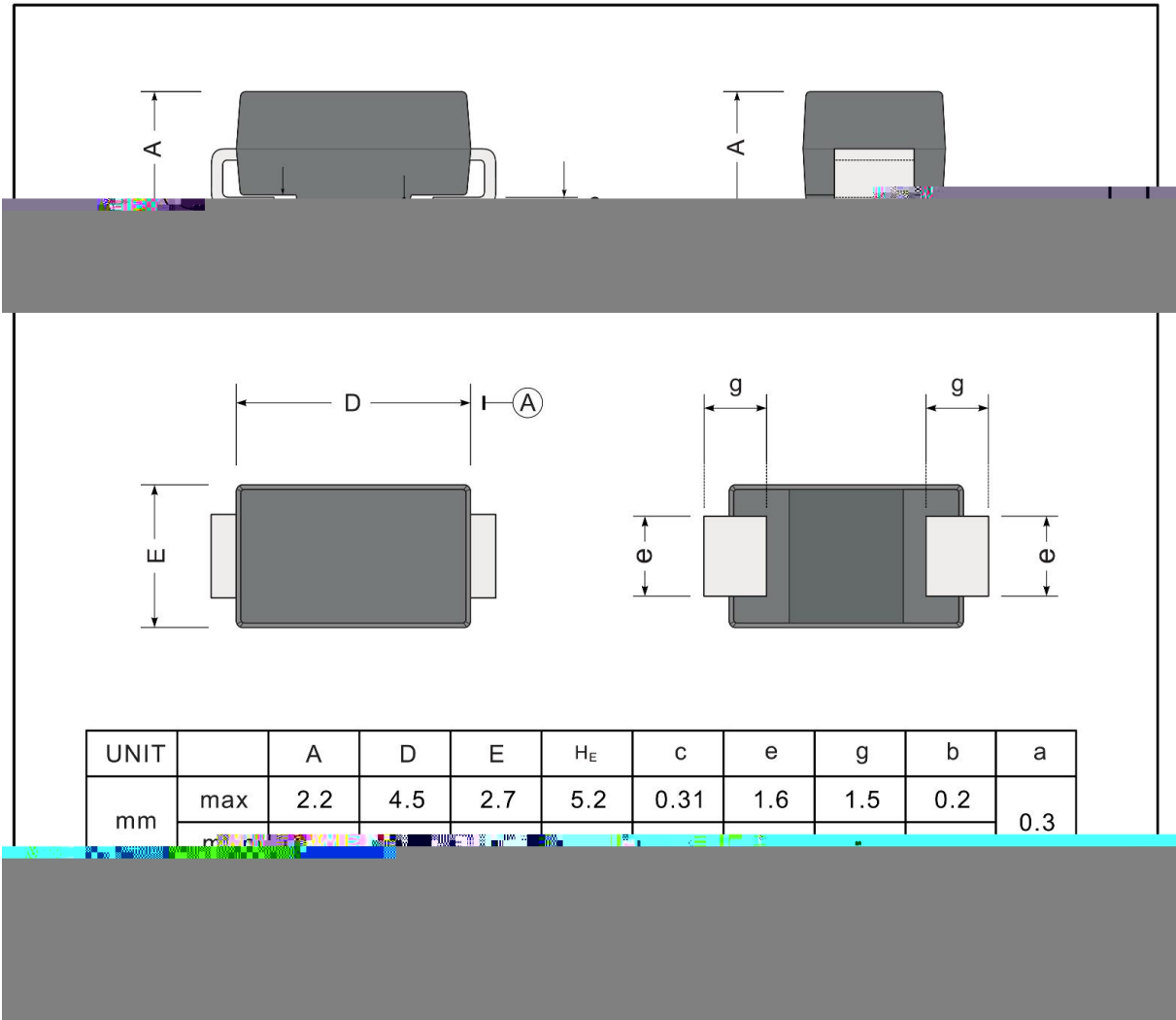
Parameter	Symbol	Test Conditions	数值 Rating							Unit
			ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	
Maximum Forward Voltage	V _F	I _F =1.0A	1.0				1.25		1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25℃	5.0							μA
		T _a =125℃	100							μA
Maximum Reverse Recovery Time	t _{rr}	I _F =0.5A I _R =1.0A I _{rr} =0.25A	35							ns

Timing diagram showing a square wave pulse and a corresponding signal trace. The pulse is labeled "PULSE" and has a duration of 0.1. The signal trace shows a sharp transition from low to high, followed by a gradual decay. The vertical scale is marked as 25V/div.

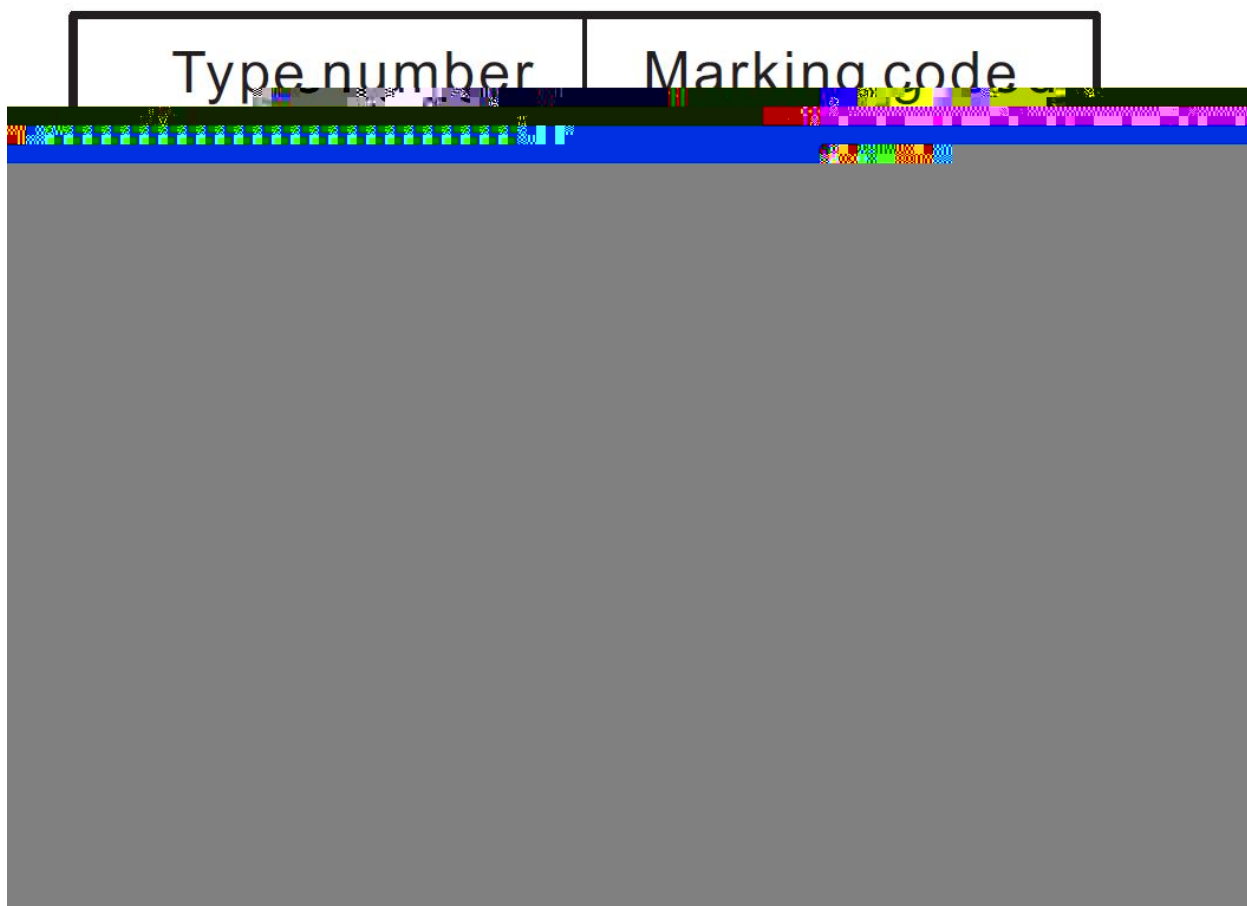


外形尺寸图 / Package Dimensions

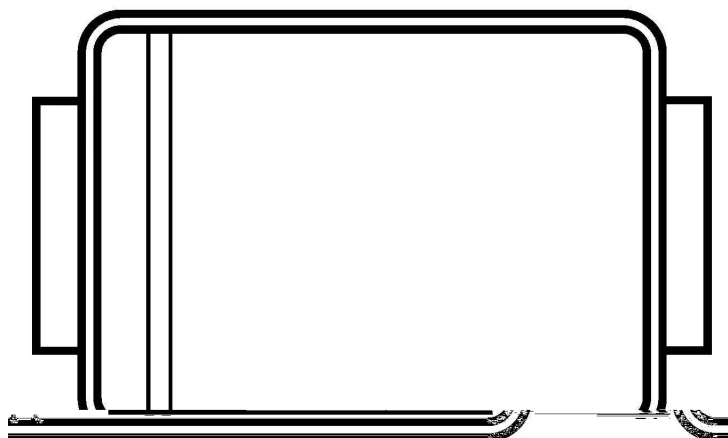
SMA



Marking



印章说明 / Marking Instructions



ES1D

1 *

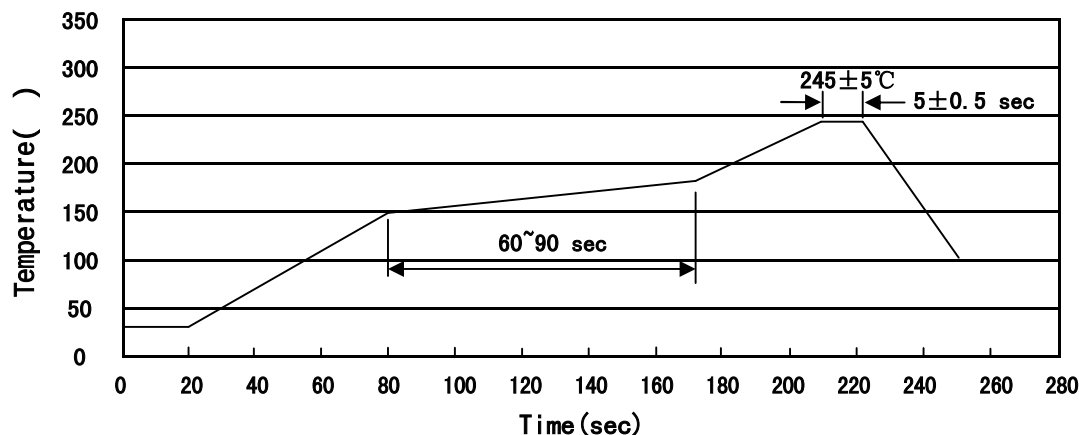
3 *

Note:

ES1D Product Type Code

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

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | |
|---|-------------|-----------|--|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | 2 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

260±5°C 10±1 sec. Temp.:260±5°C Time:10±1 sec

包装规格 / 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
SMA	5000	2	10000	7	70000	13" ×12	336X336X40	380X335X366

使用说明 / Notices