修订记录 / Revised record

A	2017-11				
B	2021-6-7	4/7	b 5 50000 7 70000 340X340X40、350X350X230 336X336X40、380X335X366		

[redacted]

DATA SHEET

ES1A~ES1J

Rev. B Jun.-2021

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

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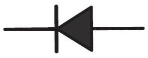
General purpose.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning

PIN	DESCRIPTION
1	[redacted]

[redacted]

印章代码 / Marking

See Marking Instructions

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

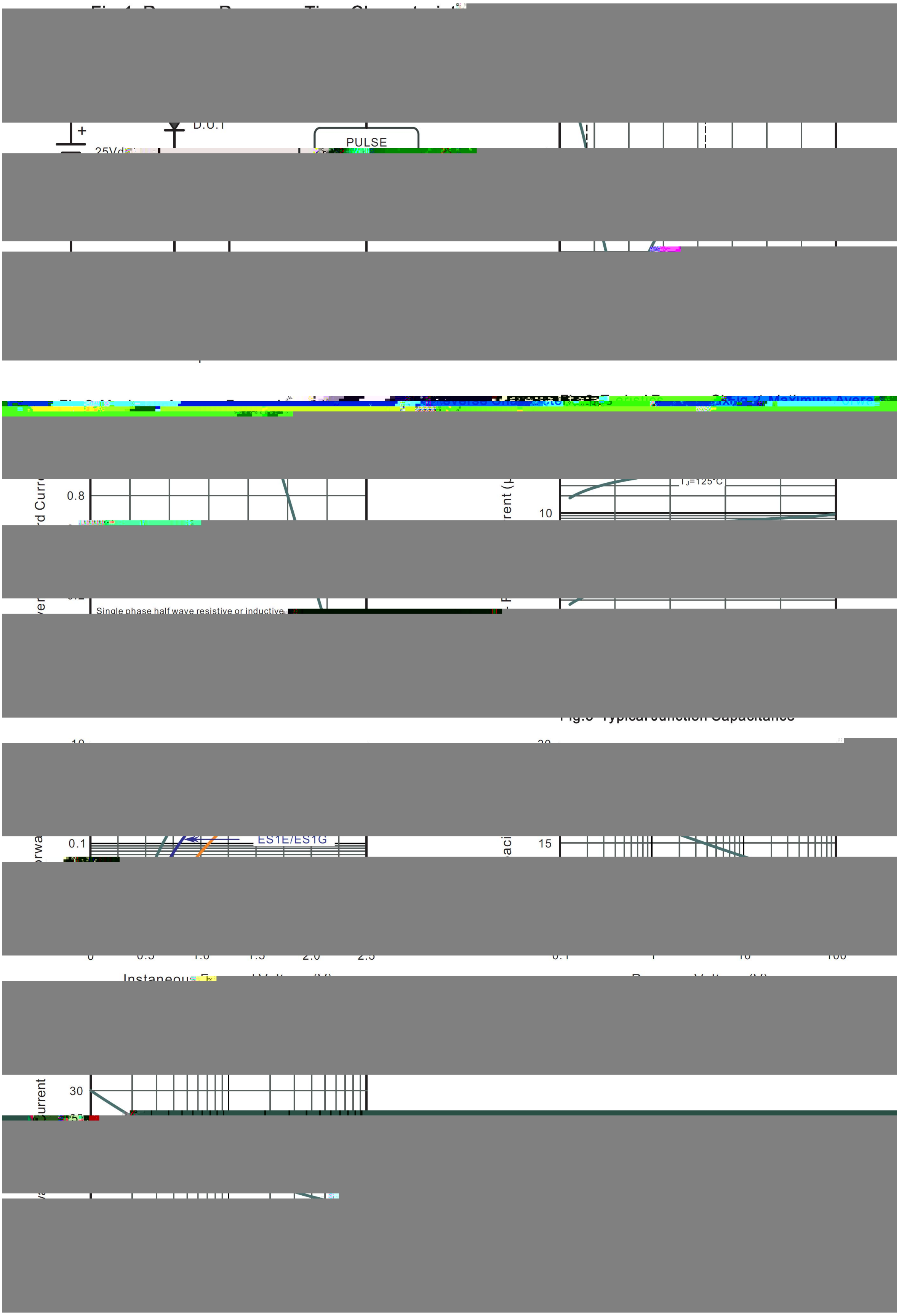
Parameter	Symbol	Rating							Unit
		ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified 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							℃/W
Operating and Storage Temperature Range	T_j,T_{stg}	-55~+150							℃

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℃)

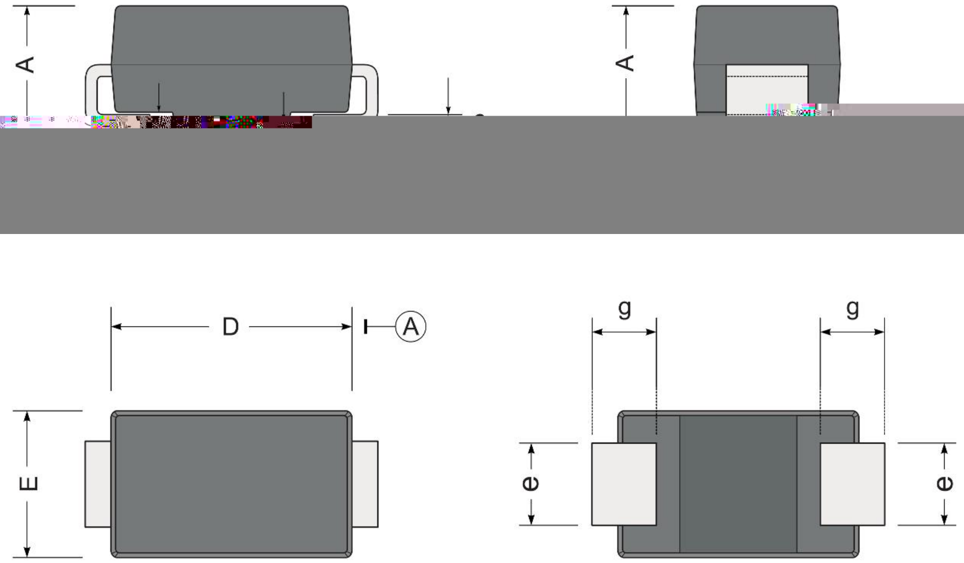
Parameter	Symbol	Test Conditions	数值 Rating							Unit
			ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	
Maximum Forward Voltage	V_F	I_F=1.0A	1.0				1.25		1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	T_a=25℃	5.0							μA
		T_a=125℃	100							μA
Maximum Reverse Recovery Time	t_{rr}	I_F=0.5A I_R=1.0A I_{rr}=0.25A	35							ns

电参数曲线图 / Electrical Characteristic Curve



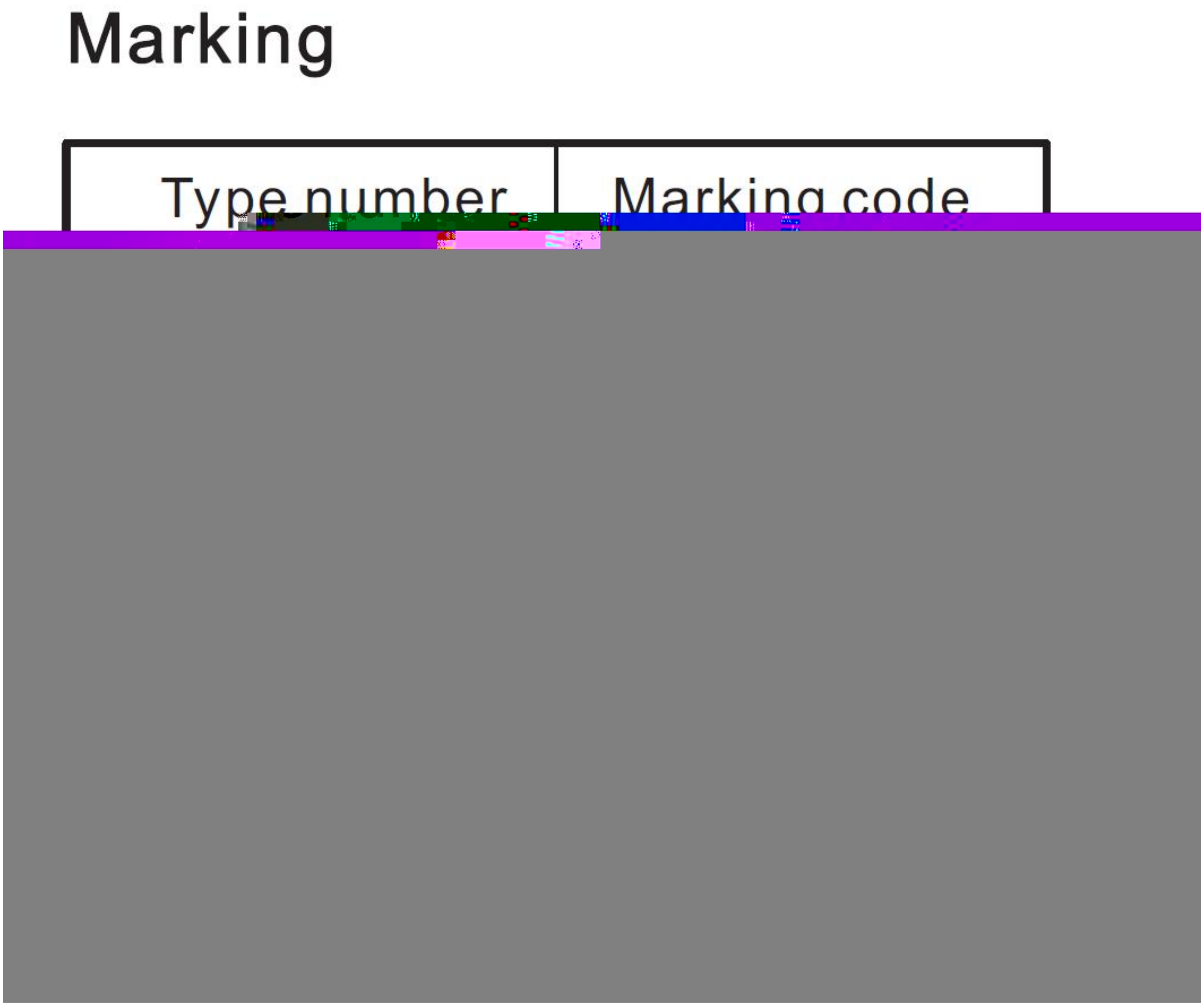
外形尺寸图 / Package Dimensions

SMA



UNIT		A	D	E	H_E	c	e	g	b	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.2	0.3
	min	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

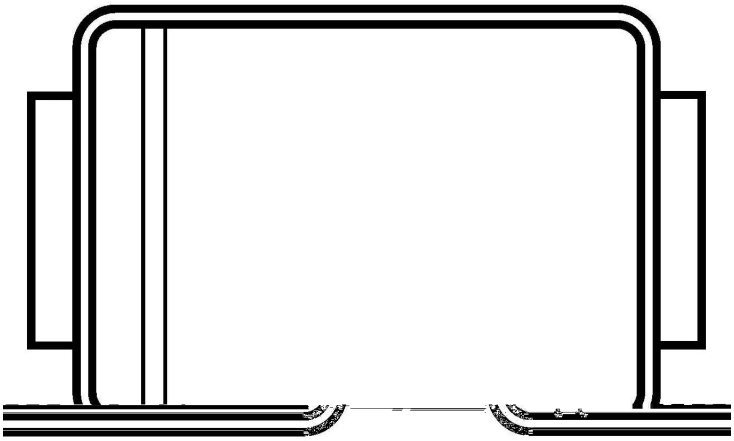
印章说明 / Marking Instructions



Marking

Type number	Marking code

印章说明 / Marking Instructions



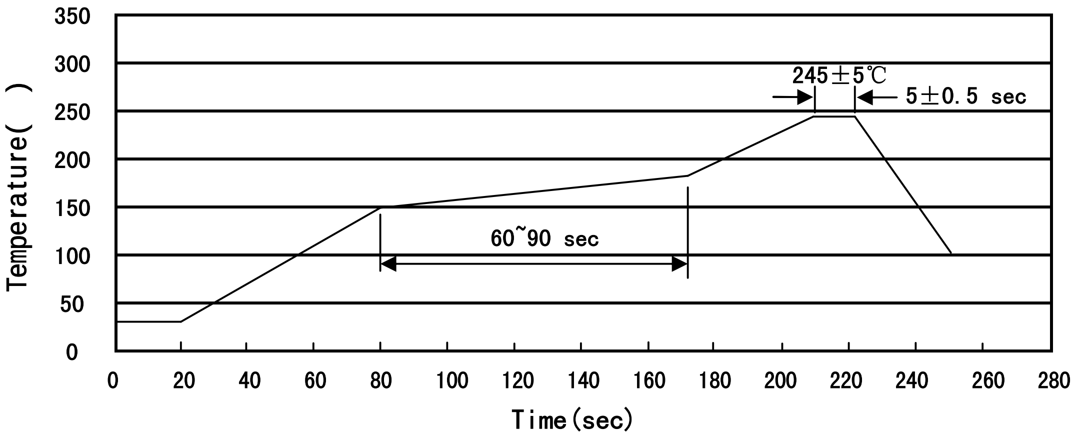
ES1D

**** 1 * 3 *

Note:

ES1D	Product Type Code
****	Lot No. Code The 1st * means:YM Code The last 3 * means:little Lot No ThY

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℃, 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.

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

260±5℃ 10±1 sec. Temp.:260±5℃ 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