

/ Revised record

[illegible]

ES1A~ES1J

Rev. B Jun.-2021



DATA SHEET

M I ? fae 50V~600V 1.0A SMA
Surface Mount Superfast Recovery Rectifier,Reverse Voltage:50 to600V q EU HI

/ 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							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

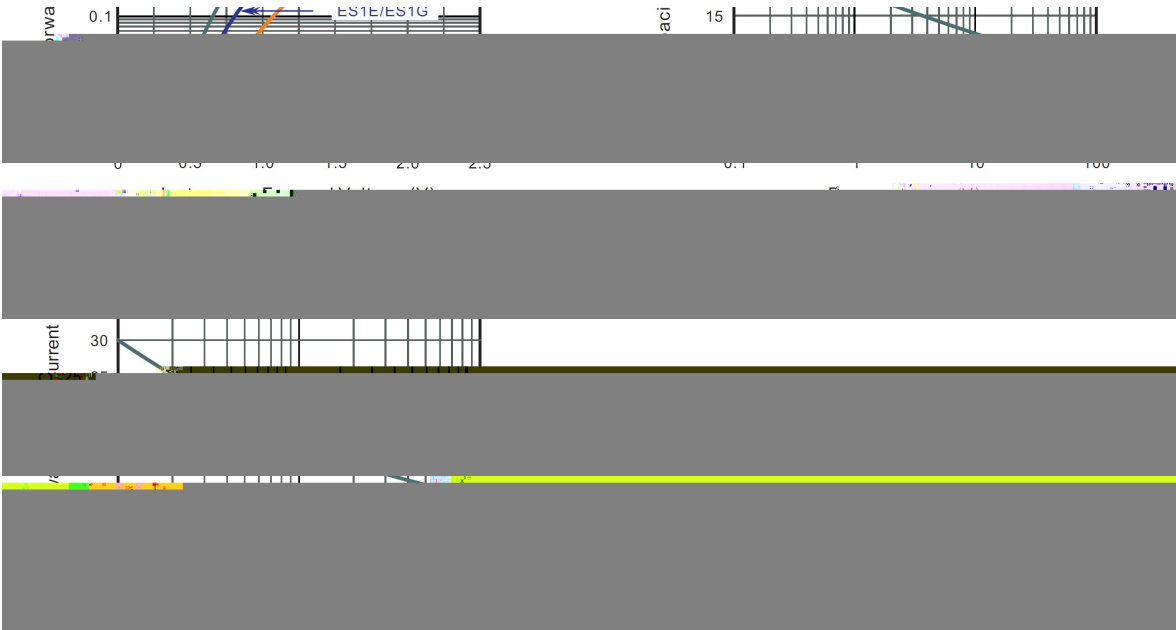
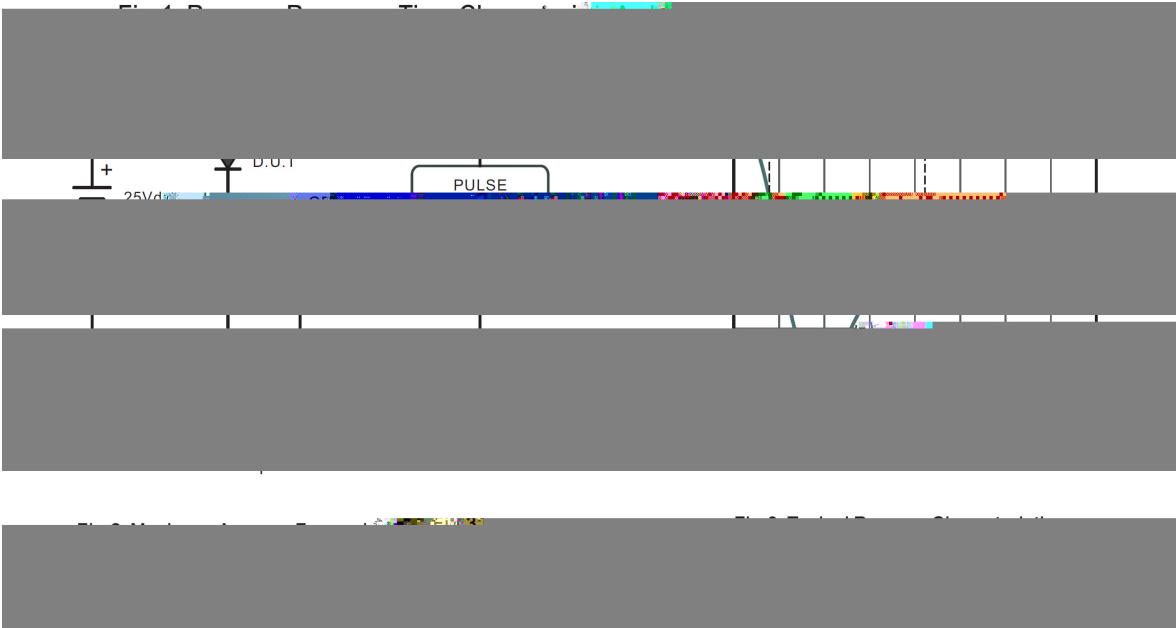
Note:

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

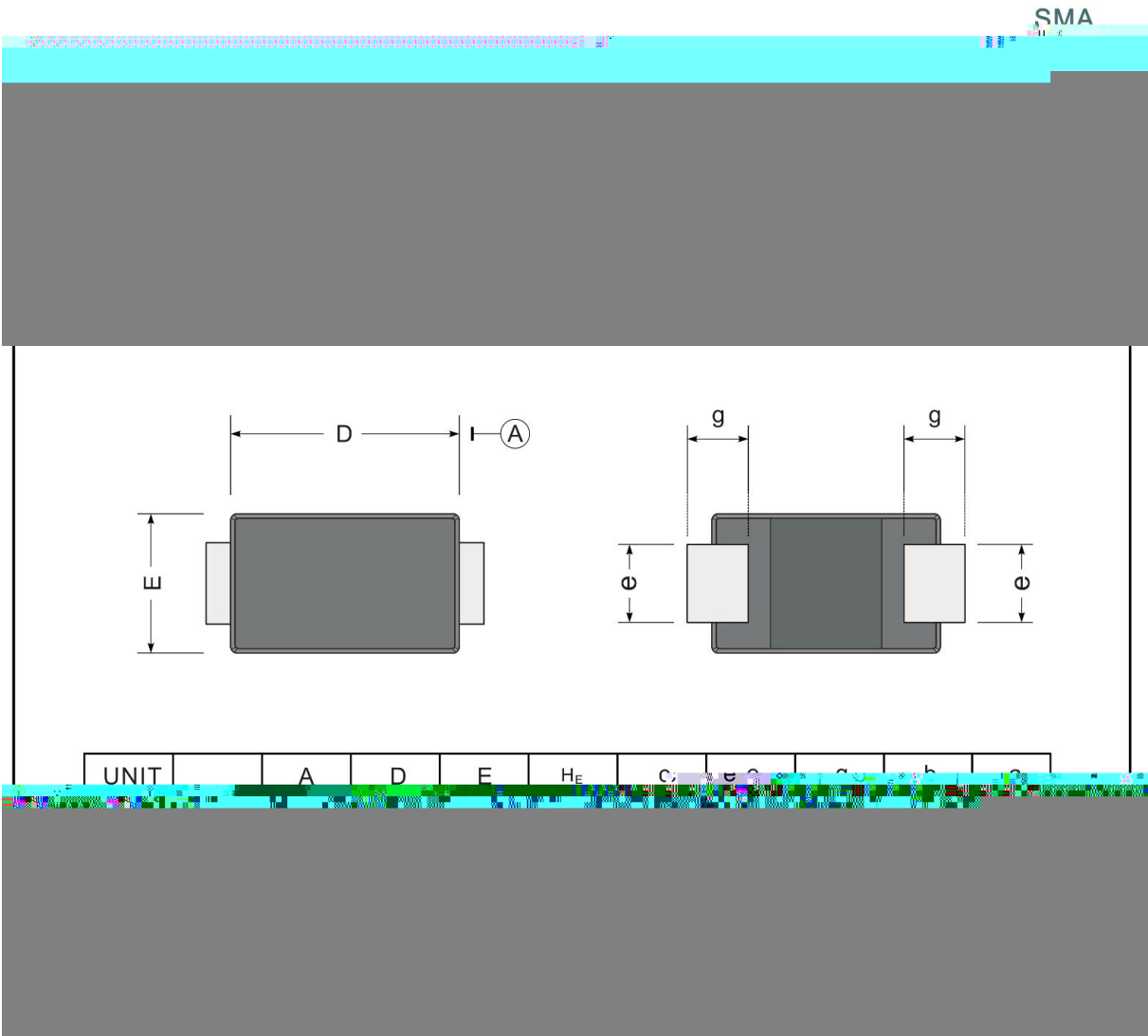
/ Electrical Characteristics(Ta=25)

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

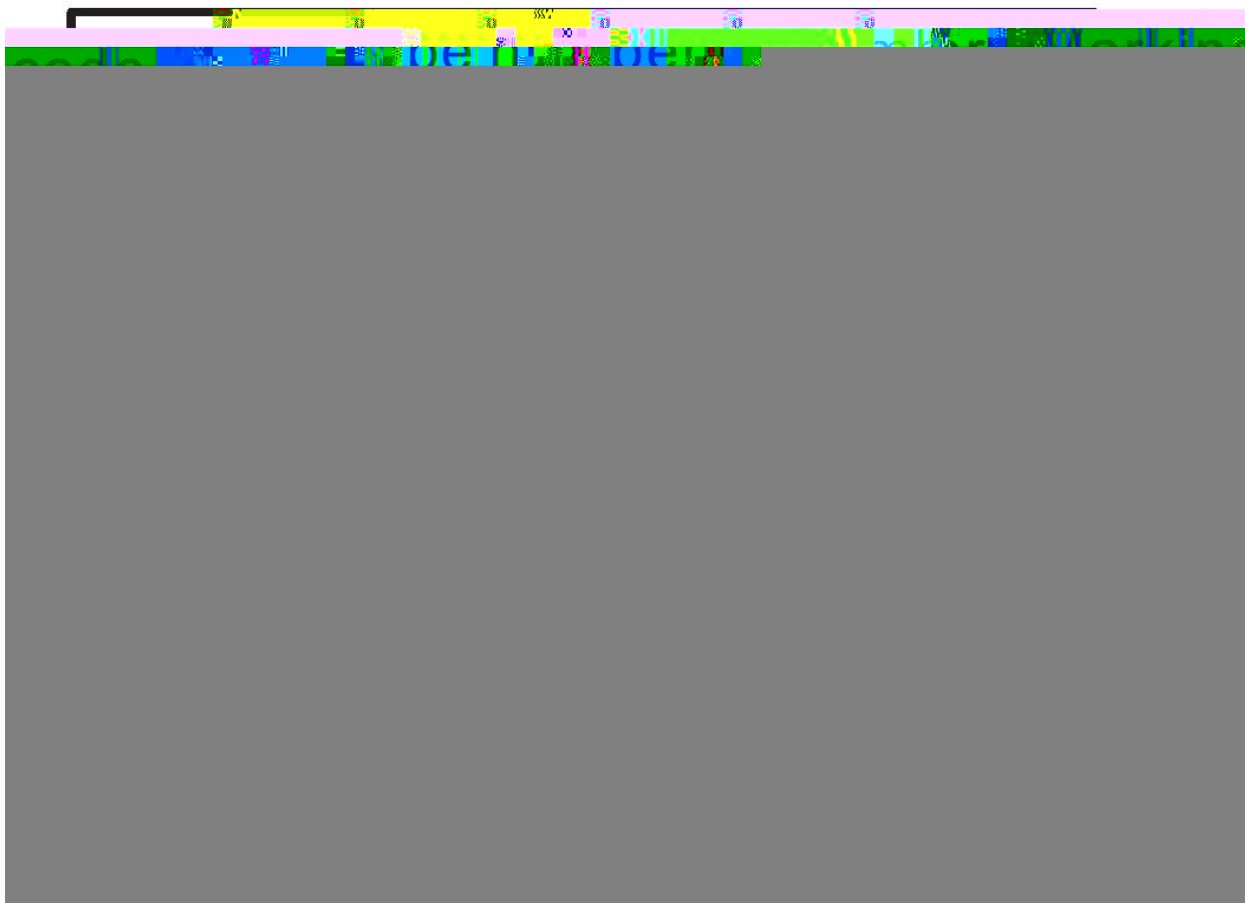
/ Electrical Characteristic Curve



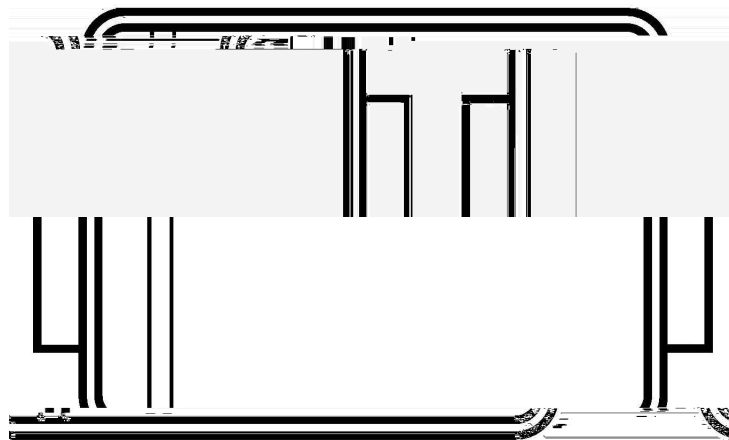
/ Package Dimensions



Marking



/ 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

() /

10

- 1

150 180

60 90sec;

2

245±5

5±0.5sec;

3

2

10°C/sec.
- Note:

1.Preheating:150~180°C, Time:60~90sec.

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

3. Cooling Speed: 2~10°C/sec.

~ / Resistance to Soldering H ☐