

Rev.A Aug.-2023

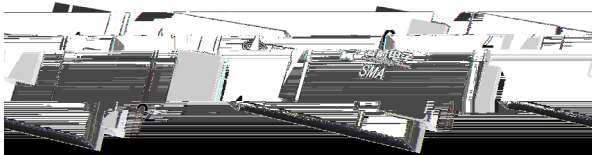
800V 1.0A SMA

Surface Mount Superfast Recovery Rectifier, Reverse Voltage: 800V, Forward Current: 1.0A, SMA package.

RoHS 2011/65/EU

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

General purpose.

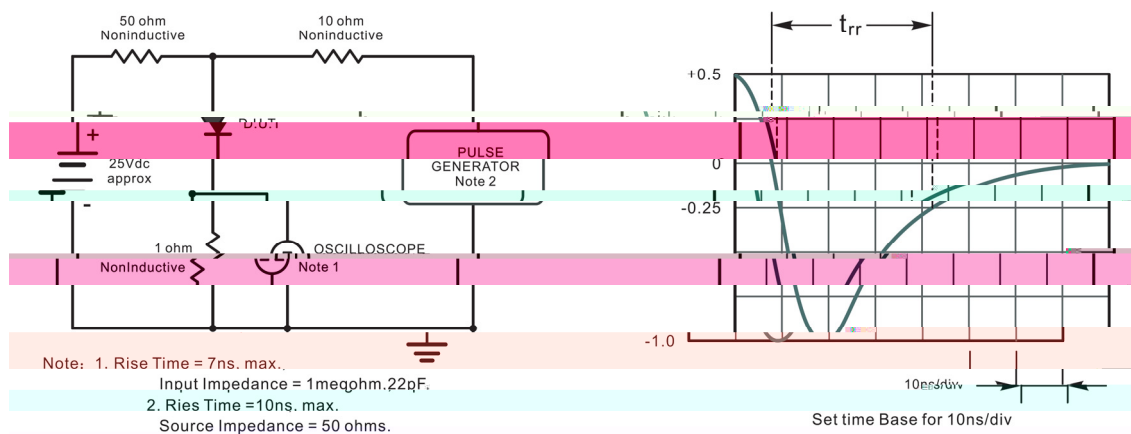
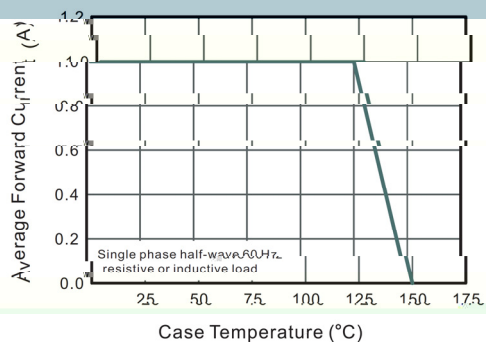
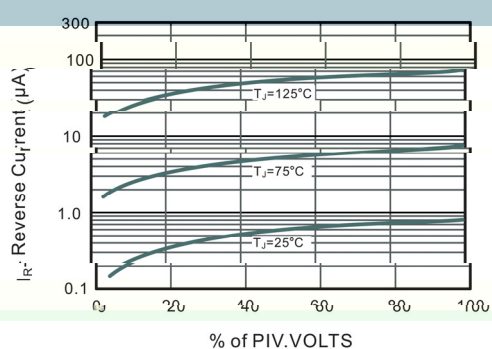
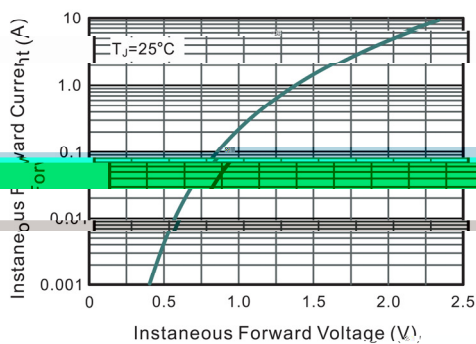
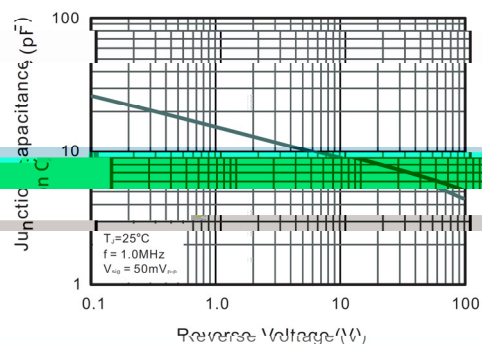
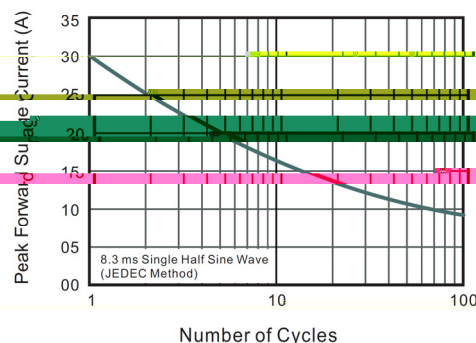


Parameter	Symbol	Rating	Unit
		ES1K	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	V
Maximum RMS voltage	V_{RMS}	560	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Maximum Average Forward Rectified Current at $T_c=125\text{ }^{\circ}\text{C}$	$I_{F\text{ }AV}$	1.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30	A
Typical Junction Capacitance at $V_R=4V$, $f=1\text{MHz}$	C_j	15	pF
Typical Thermal Resistance ¹	$R_{\theta JA}$	60	/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150	

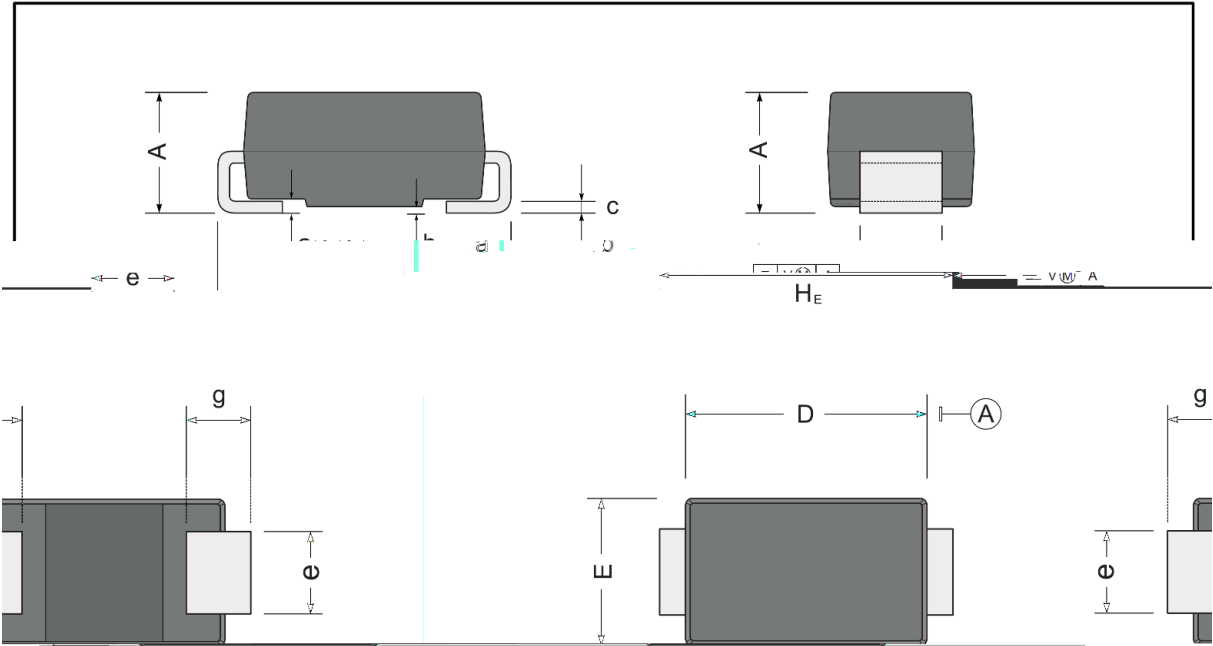
Note:

1 P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

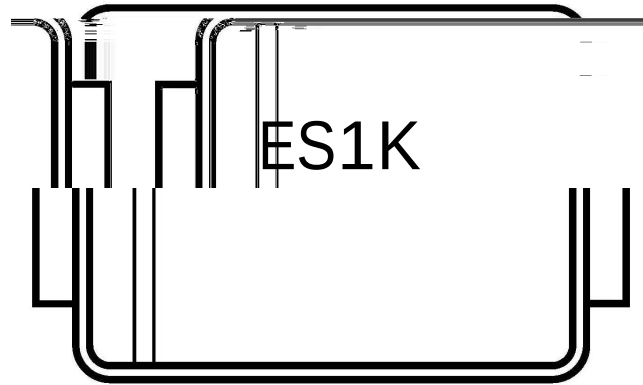
Parameter	Symbol	Test Conditions	Rating	Unit
			ES1M	
Maximum Forward Voltage	V_F	$I_F=1.0A$	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25$	5.0	μA
		$T_a=125$	100	μA
Maximum Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$	35	ns

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

Fig.2 Maximum Average Forward Current Rating

Fig.3 Typical Reverse Characteristics

Fig.4 Typical Forward Characteristics

Fig.5 Typical Junction Capacitance

Fig.6 Maximum Non-Repetitive Peak Forward Surge Current


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	1.9	4.0	2.3	4.7	0.15	1.3	0.9	0.05	
mil		87	181	106	205	12.6	63	59	7	



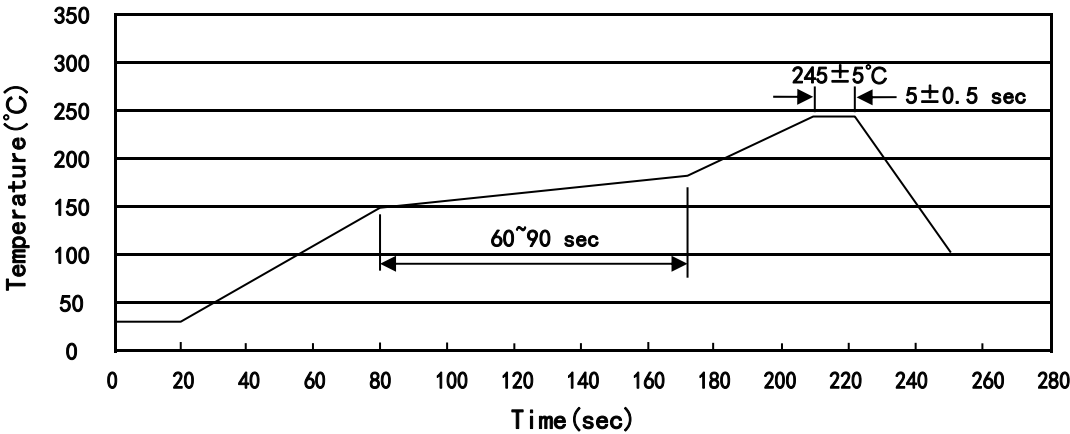
ES1K

Note:

ES1K Product Type Code

Lot No. Code, code change with Lot No

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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SMA	5,000	2	10,000	7	70,000	13 ×12	336×336×40	380×335×366