

/ Revised record

A	2021-3-27	all	W01		

/ Descriptions

800V 2.0A SMA

Surface Mount Superfast Recovery Rectifier, Reverse Voltage:800V,Forward Current:2.0A, SMA package.

/ Features

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. Halogen free product.

/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



PIN	DESCRIPTION
1	Cathode



/ Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
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 $T_c = 125^{\circ}C$	$I_F(AV)$	2	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50	A
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	40	pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	60	$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^{\circ}C$

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

/ Electrical Characteristics(Ta=25)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Maximum Forward Voltage	V_F	$I_F=2.0A$	1.68	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^{\circ}C$	5	μA
		$T_a=125^{\circ}C$	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

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

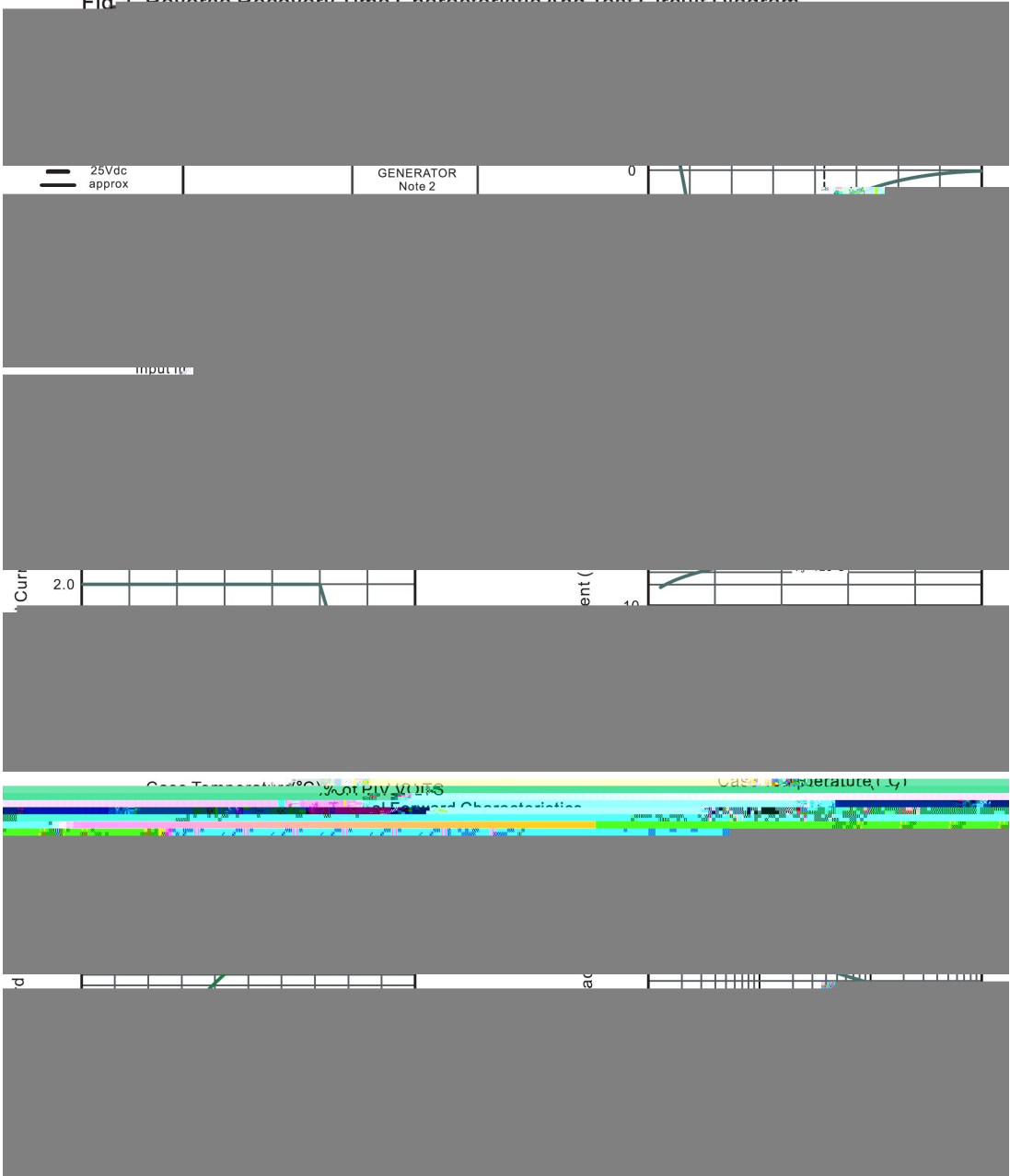
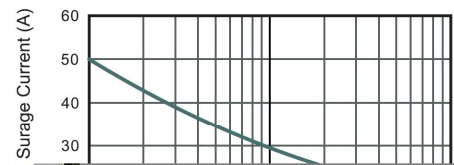
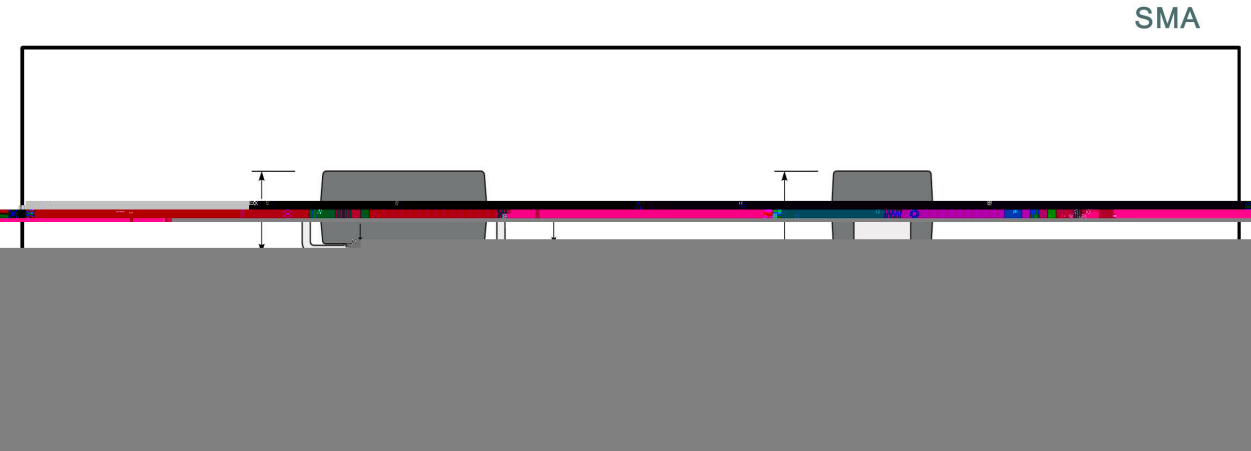


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



/ Package Dimensions



UNIT		A	D	F	H _E	c	e	q	2 ϕ
mm	min	1.9	4.0	2.2	4.7	0.15	1.2	0.9	2.5

/ **Marking Instructions**



说明：

ES2K： 为型号代码

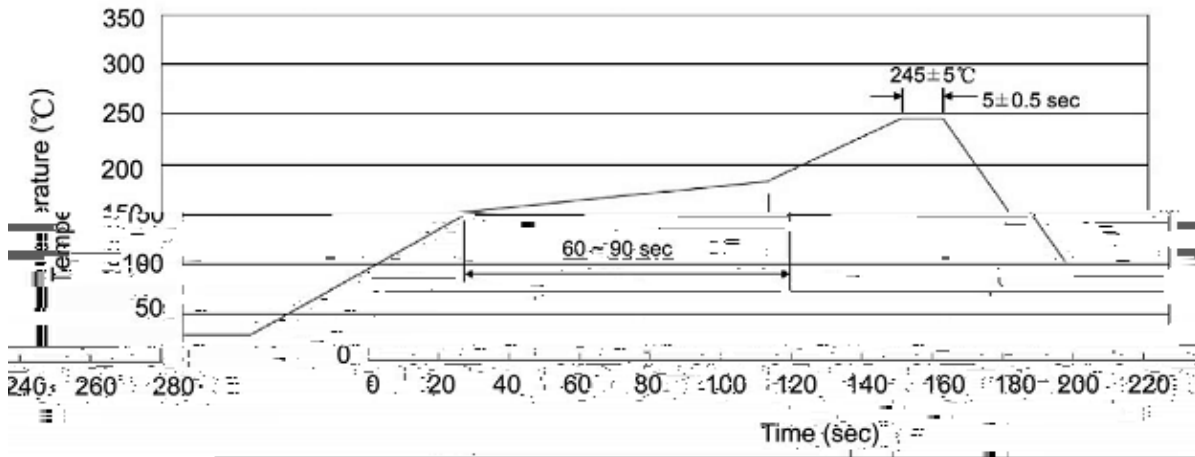
****： 为生产批号追溯码，第 1 个*为年月代码，后面 3 个*为当月小批号代码

Note:

ES2K： 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 | 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. |

/ Resistance to Soldering Heat Test Conditions

260±5°C 10±1 sec. Temp.:260±5°C 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)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMA	5000	2	10000	7	70000	13" ×12	336X336X40	380X335X366

/ Notices