

描述 / Descriptions

快恢复二极管，反向电压：50V~1000V，正向电流：2.0A，SMA 封装。

Surface Mount Fast Recovery Rectifiers, Reverse Voltage : 50 to1000V,Forward Current:2.0A ,SMA package.

特征 / Features

玻璃钝化芯片，无铅符合欧盟 RoHS 指令 2011/65/EU，适用表面贴装。无卤产品。

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

用途 / Applications

一般用途。

General purpose.

内部等效电路 / Equivalent Circuit

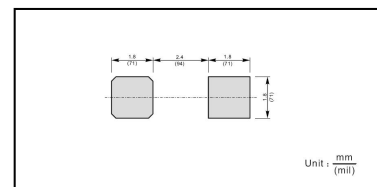


引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



印章代码 / Marking

见印章说明。See Marking Instructions.

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

参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 125^\circ C$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single HalfSine Wave Superimposed on Rated Load	I_{FSM}	50							A
Typical Junction Capacitance at $V_R=4V$ $f=1MHz$	C_j	22							pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	65							°C/W
	$R_{\theta JC}$	20							
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

Note:

1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating						单位 Unit
			RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	
Maximum Instantaneous Forward Voltage	V_F	$I_F=2.0A$	1.3						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ C$	5.0						μA
		$T_a=125^\circ C$	100						μA
Maximum Reverse Recovery Time	t_{rr}	$I_F = 0.5 A$ $I_R = 1 A$ $I_{rr} = 0.25 A$	150			250	500		ns

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

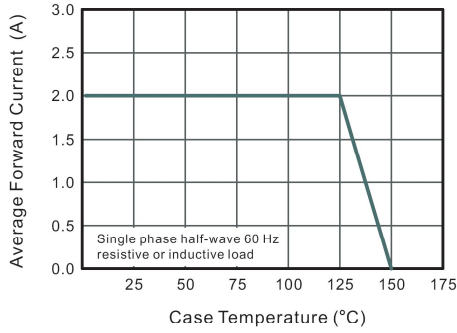


Fig.2 Typical Reverse Characteristics

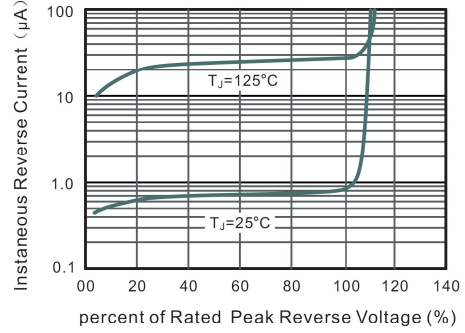


Fig.3 Typical Instaneous Forward Characteristics

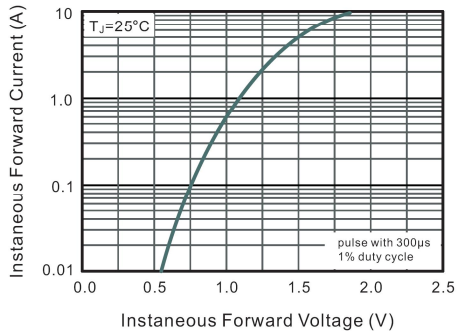


Fig.4 Typical Junction Capacitance

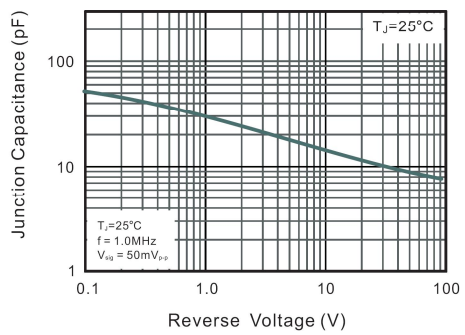
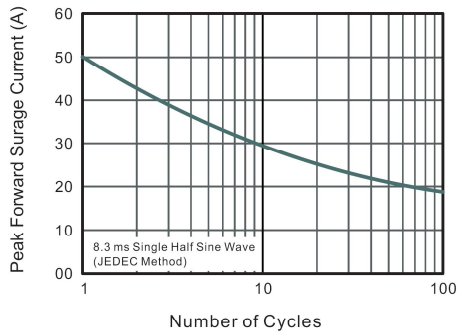
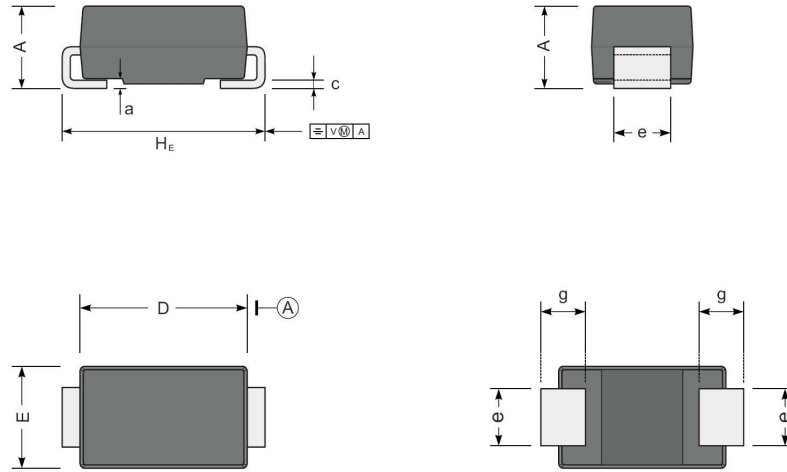


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



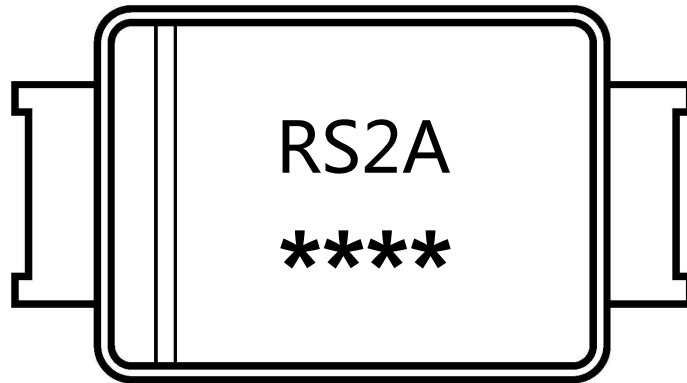
外形尺寸图 / Package Dimensions

SMA



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	

印章说明 / Marking Instructions



说明：

RS2A： 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:

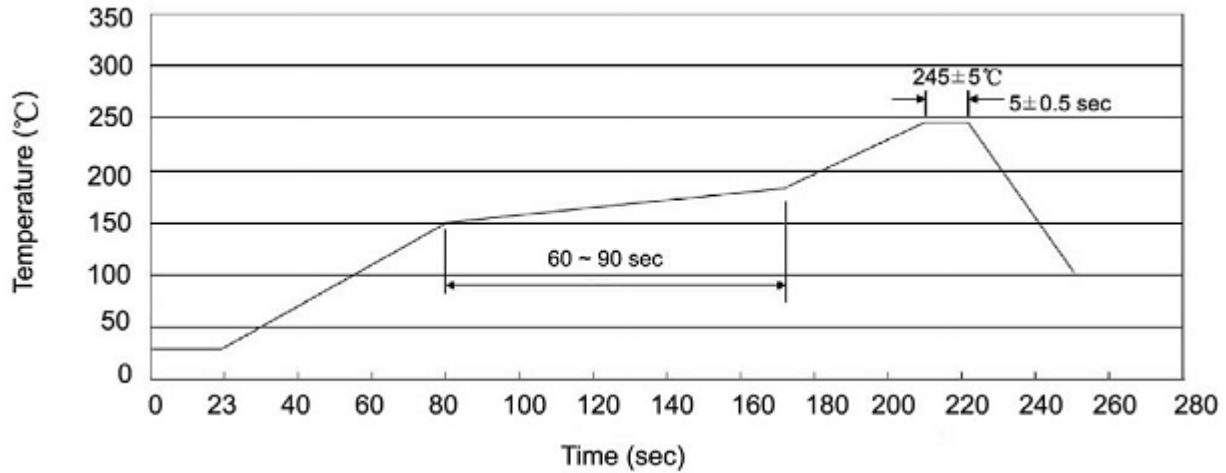
RS2A： Product Type Code

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

Marking

Type number	Marking code
RS2A	RS2A
RS2B	RS2B
RS2D	RS2D
RS2G	RS2G
RS2J	RS2J
RS2K	RS2K
RS2M	RS2M

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



说明：

- 1、预热温度 $25 \sim 150^\circ\text{C}$ ，时间 $60 \sim 90\text{sec}$ ；
- 2、峰值温度 $245 \pm 5^\circ\text{C}$ ，时间持续为 $5 \pm 0.5\text{sec}$ ；
- 3、焊接制程冷却速度为 $2 \sim 10^\circ\text{C}/\text{sec}$ 。

Note:

- 1.Preheating: $25 \sim 150^\circ\text{C}$, Time: $60 \sim 90\text{sec}$.
- 2.Peak Temp.: $245 \pm 5^\circ\text{C}$, Duration: $5 \pm 0.5\text{sec}$.
3. Cooling Speed: $2 \sim 10^\circ\text{C}/\text{sec}$.

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

温度： $260 \pm 5^\circ\text{C}$

时间： 10 ± 1 sec.

Temp.: $260 \pm 5^\circ\text{C}$

Time: 10 ± 1 sec

包装规格 / Packaging SPEC.

卷盘包装 / 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	5	50000	13" ×12	340X340X40	350X350X230

使用说明 / Notices