

RS2AF~RS2MF

Rev.C Feb.-2015

描述 / Descriptions

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

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

特征 / Features

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

Features: Glass Passivated Chip Junction, Fast reverse recovery time, Lead free in comply with EU ROHS 2011/65/EU directives, For surface mounted applications. Halogen free product.

用途 / Applications

一般用途。

General purpose.

内部等效电路 / Equivalent Circuit

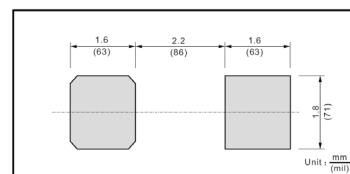


引脚排列 / Pinning



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
		RS2AF	RS2BF	RS2DF	RS2GF	RS2JF	RS2KF	RS2MF	
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 Ta = 125°C	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Typical Junction Capacitance ¹⁾	C_j	35							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	60							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

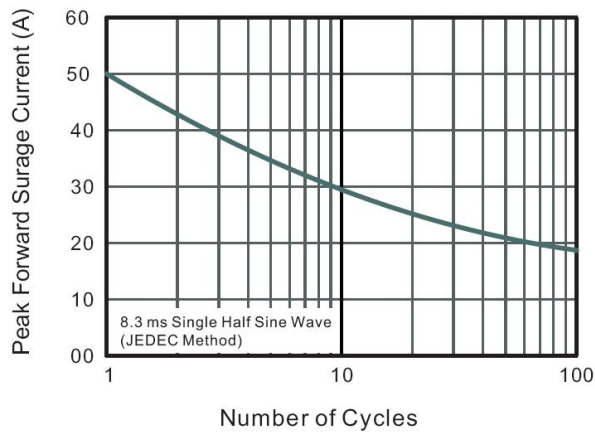
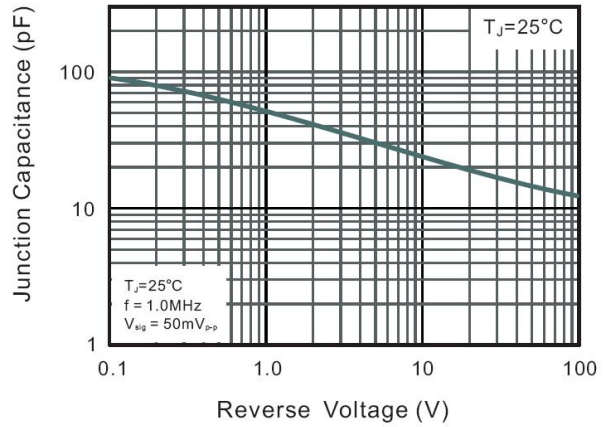
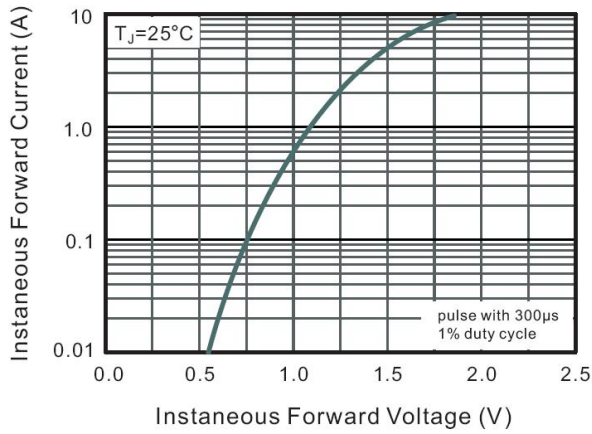
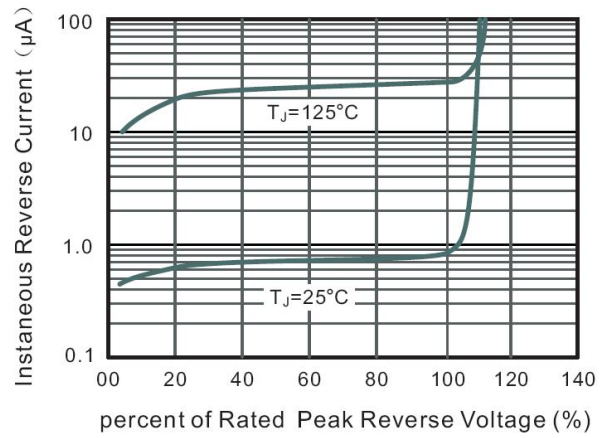
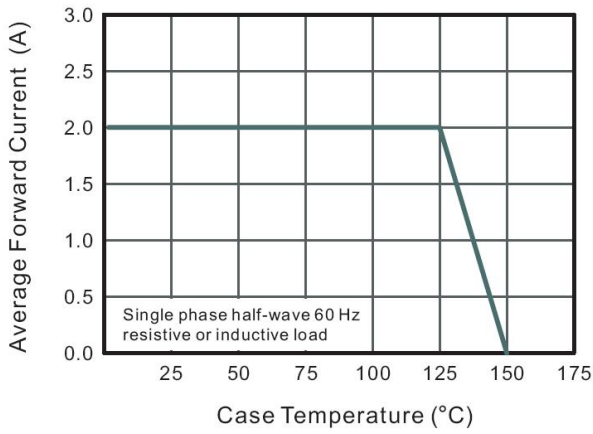
Note:

- 1) Measured at 1MHz and applied reverse voltage of 4V D.C
- 2) P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

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

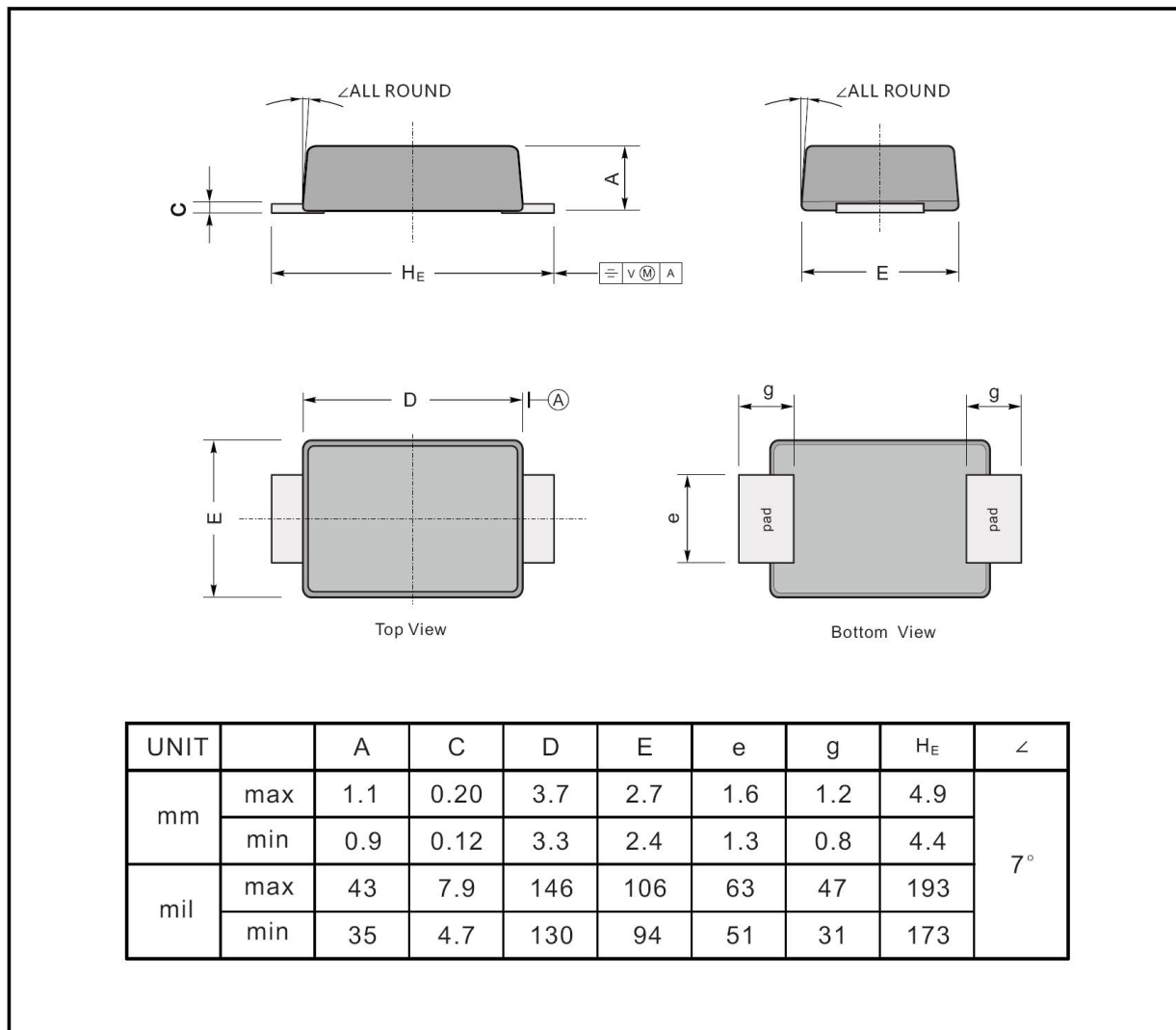
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating						单位 Unit
			RS2AF	RS2BF	RS2DF	RS2GF	RS2JF	RS2KF	
Maximum Instantaneous Forward Voltage	V_F	$I_F=2.0A$	1.3						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ C$	5.0						μA
		$T_a=125^\circ C$	100						μA
Maximum Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$	150		250		500		ns

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

SMAF





Marking

Type number	Marking code
RS2AF	RS2A
RS2BF	RS2B
RS2DF	RS2D
RS2GF	RS2G
RS2JF	RS2J
RS2KF	RS2K
RS2MF	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
SMAF	3000	5	15000	5	75000	7" × 11"	185X180X105	550X210X220

使用说明 / Notices