

# 1N5817W~1N5819W

Rev.C Feb.-2015

## 描述 / Descriptions

肖特基整流二极管，薄型 SOD-123FL 封装。

Schottky Barrier Rectifiers,SOD-123FL thin package.

## 特征 / Features

低功耗，高效率，高电流，正向压降低，浪涌能力高，适用于低压，高频逆变器。无卤产品。

Low power loss, high efficiency.High current capability,low forward voltage drop,High surge capability,  
For use in low voltage, high frequency inverters.Halogen free product.

## 用途 / Applications

一般用途。

General purpose.

## 内部等效电路 / Equivalent Circuit

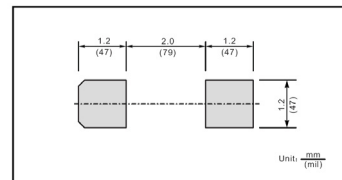


## 引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



## 印章代码 / Marking

见印章说明。See Marking Instructions.

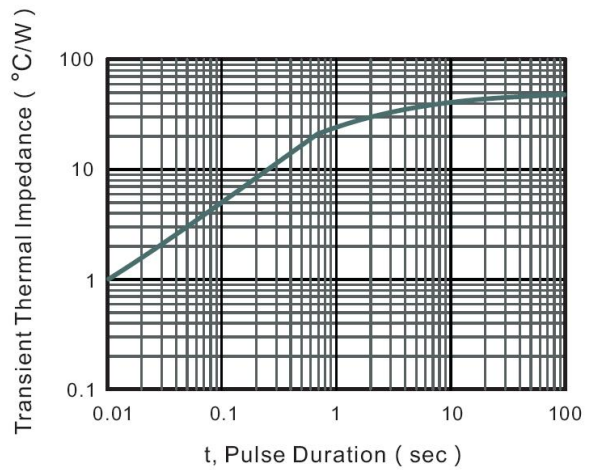
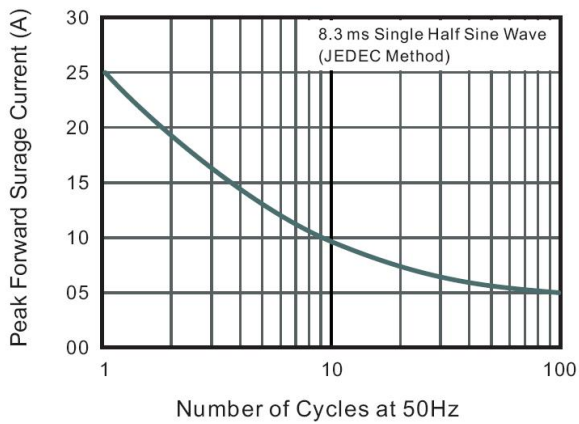
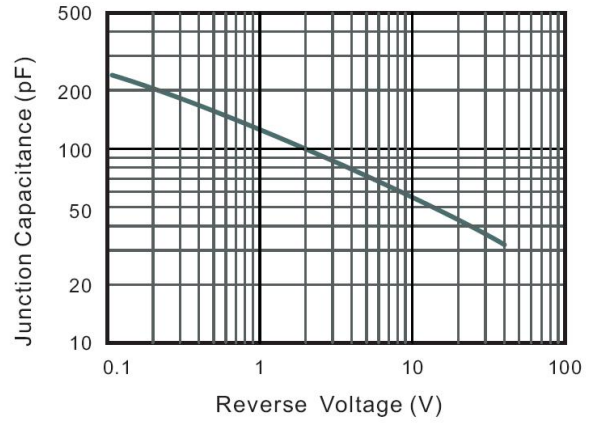
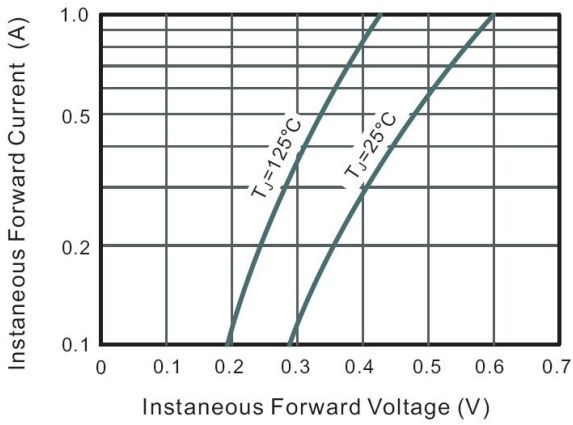
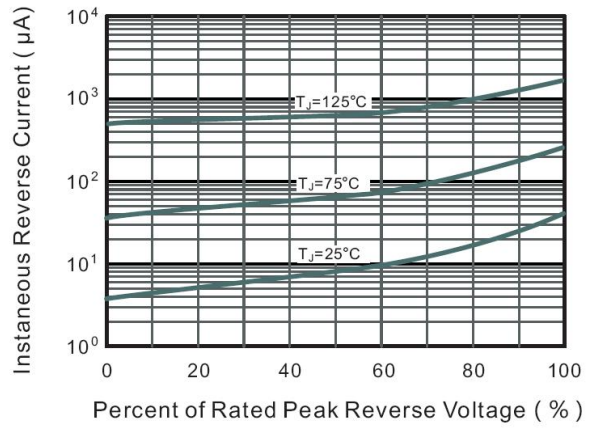
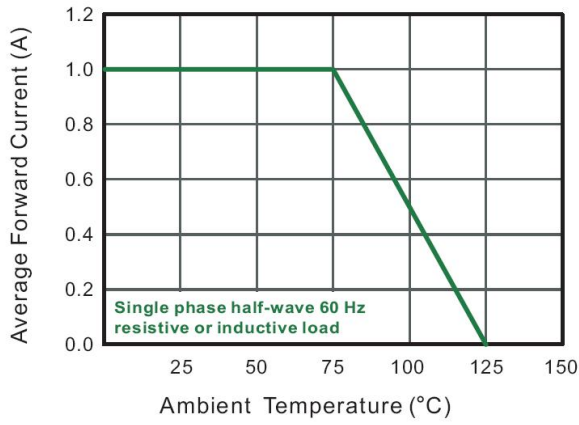
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating			单位 Unit
		1N5817W	1N5818W	1N5819W	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method) at $T_L = 70^\circ\text{C}$	$I_{FSM}$	25			A
Typical Junction Capacitance	$C_i$	110			pF
Storage and Operating Junction Temperature Range	$T_j, T_{stg}$	-55~+125			°C

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

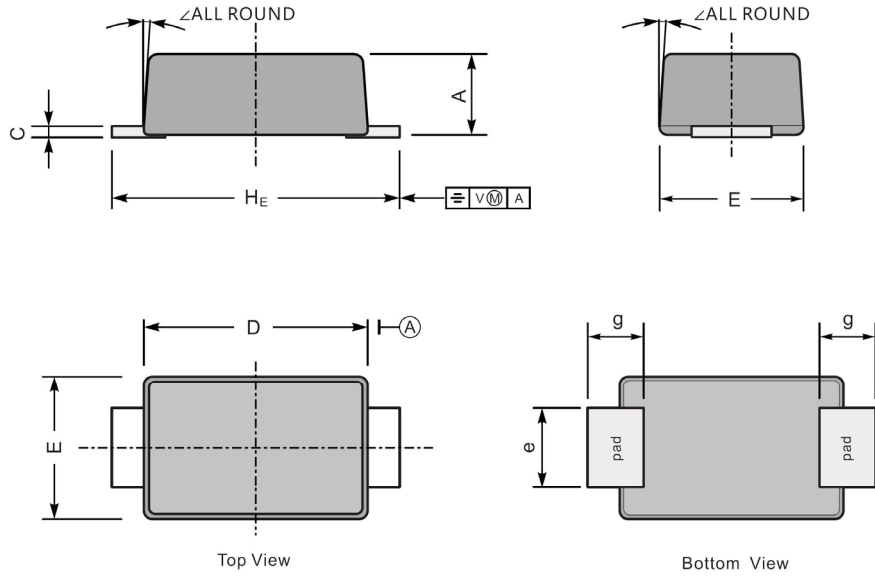
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating			单位 Unit
			1N5817W	1N5818W	1N5819W	
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=1.0\text{A}$	0.45	0.55	0.60	V
		$I_F=3.1\text{A}$	0.75	0.875	0.9	
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage	$I_R$	$T_a=25^\circ\text{C}$	1.0			mA
		$T_a=100^\circ\text{C}$	10			mA

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

SOD-123FL



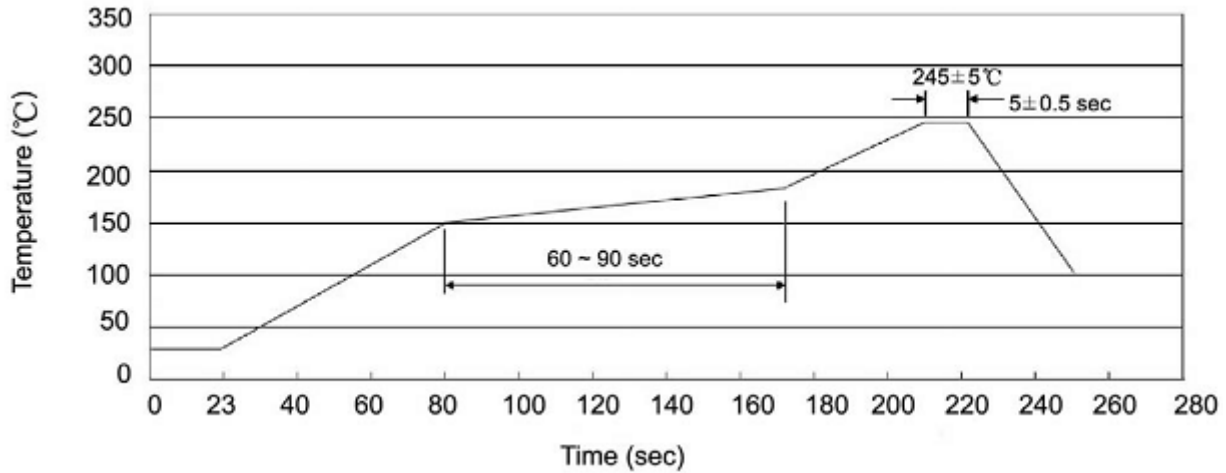
UNIT		A	C	D	E	e	g	H <sub>E</sub>	$\angle$
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

印章说明 / Marking Instructions

## Marking

Type number	Marking code
1N5817W	12A
1N5818W	13A
1N5819W	14A

**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 25~150℃，时间 60~90sec;
- 2、峰值温度 245±5℃，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10℃/sec.

Note:

- 1.Preheating:25~150℃, Time:60~90sec.
- 2.Peak Temp.:245±5℃, Duration:5±0.5sec.
3. Cooling Speed: 2~10℃/sec.

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

温度：260±5℃

时间：10±1 sec.

Temp.:260±5℃

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 <sup>3</sup> )		
	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
SOD-123FL	3000	8	24000	5	120000	7" ×11	185X180X105	550X220X210

**使用说明 / Notices**