

RB550V-30

Rev.A Nov.-2023

描述 / Descriptions

SOD-323 塑封封装 肖特基二极管。

Schottky Diode in a SOD-323 Plastic Package.

特征 / Features

过电压保护防护，低功耗，高效率，高电流能力，高浪涌能力，低正向电压降，无卤产品。

Guarding for overvoltage protection,Low power loss,high efficiency,High current capability,High surge capability,low forward voltage drop,HF Product.

用途 / Applications

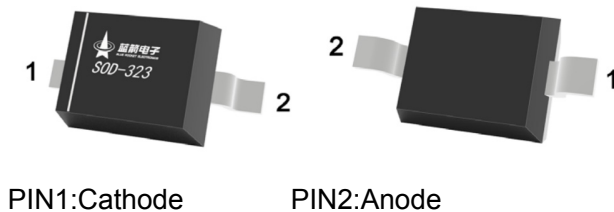
一般用途。

General purpose.

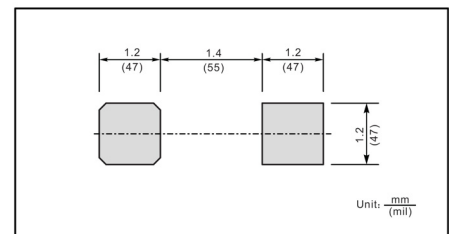
内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



The recommended mounting pad size



印章代码 / Marking

Model	RB550V-30
Marking	SS

极限参数 / Absolute Maximum Ratings($T_a=25^{\circ}\text{C}$)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
DC Reverse Voltage	V_R	30	V
Maximum Average Forward Current at $T_a=25^{\circ}\text{C}$	I_O	1.0	A
Power dissipation	P_d	200	mW
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25	A
Storage and Operating Junction Temperature Range	T_j, T_{stg}	$-55 \sim +125$	$^{\circ}\text{C}$

电性能参数 / Electrical Characteristics($T_a=25^{\circ}\text{C}$)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Maximum Instantaneous Forward Voltage	V_F	$I_F=0.7\text{A}$	0.49	V
		$I_F=1\text{A}$	0.52	
Reverse Leakage Current	I_R	$V_R=10\text{V}$	30	μA

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Power Derating Curve

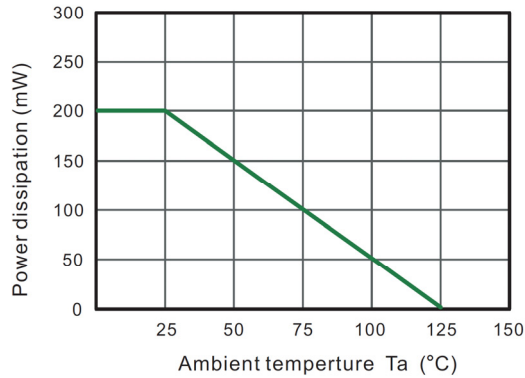


Fig.2 Typical Reverse Characteristics

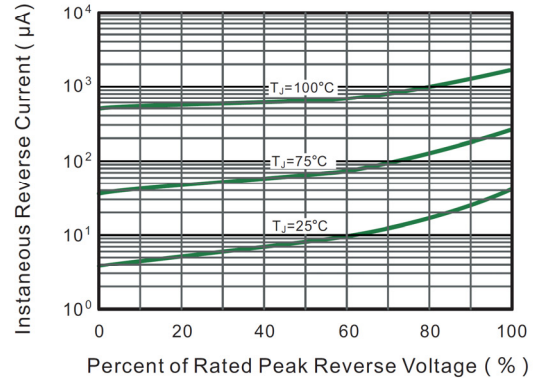


Fig.3 Typical Forward Characteristic

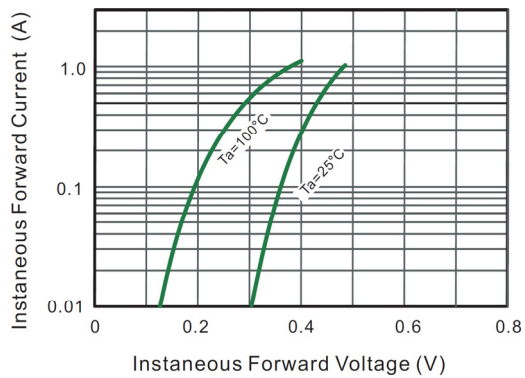


Fig.4 Typical Junction Capacitance

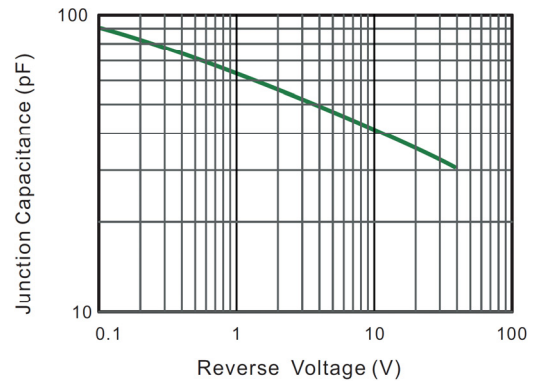
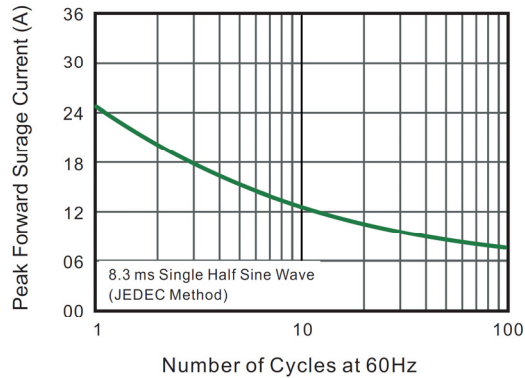
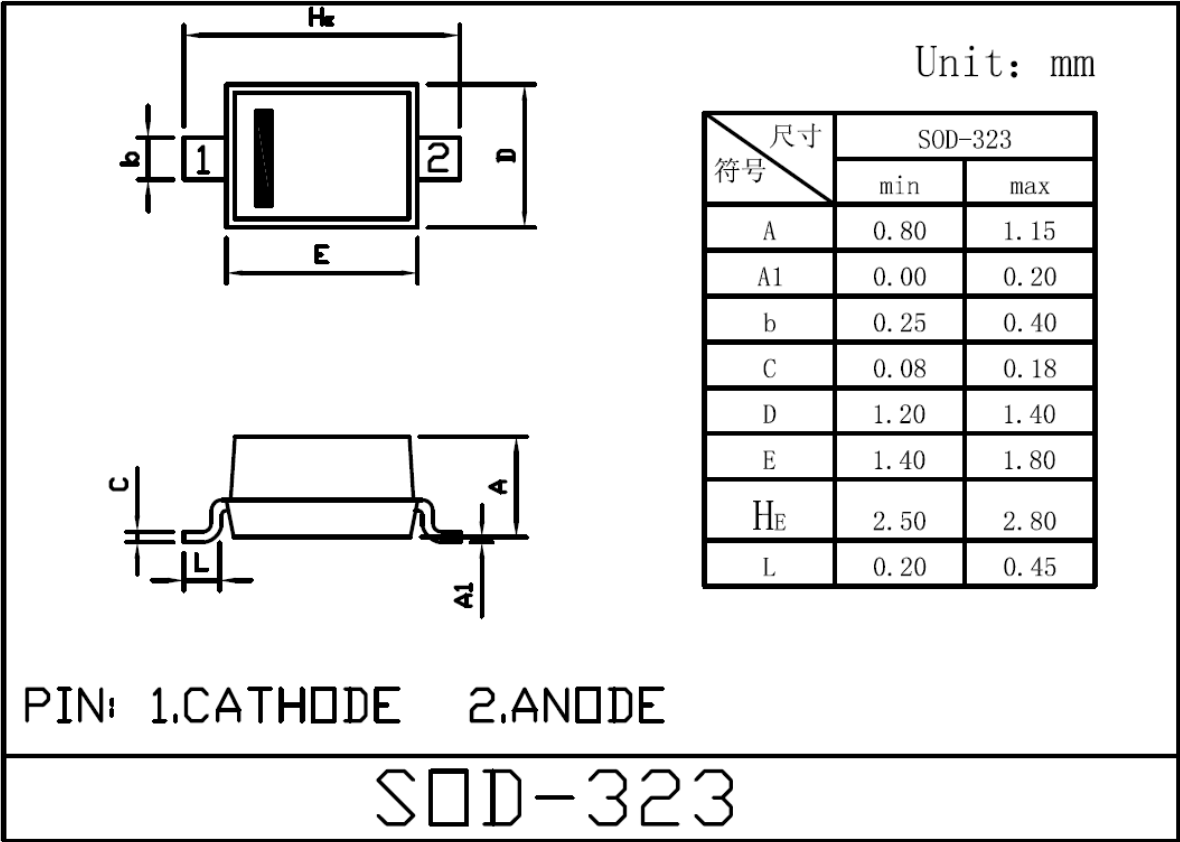


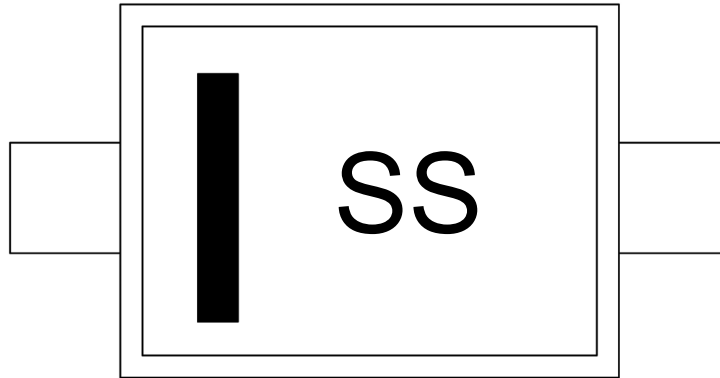
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



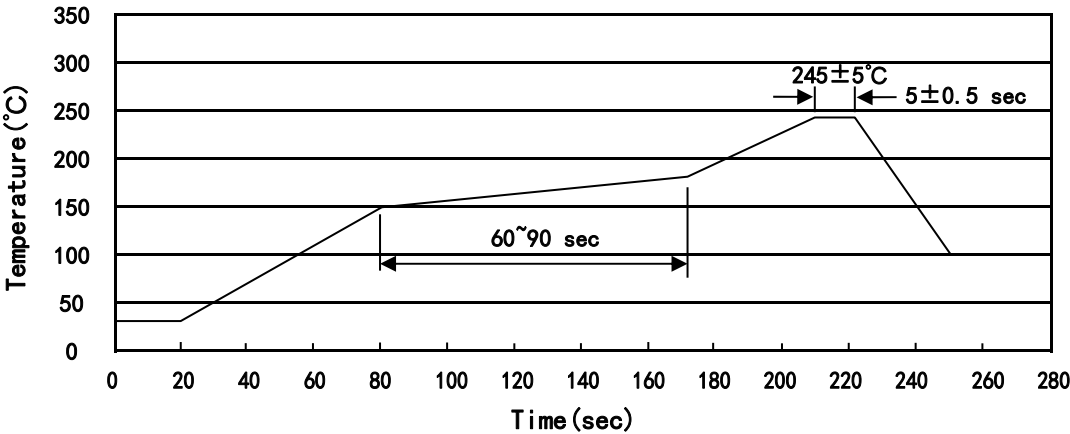
说明：

SS： 为型号代码

Note:

SS: Product Type Code

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 150 ~ 180°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

温度：260±5°C 时间：10±1 sec. Temp.:260±5°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
SOD-323	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices