

BR1SS355Q

Rev.A Oct.-2023

描述 / Descriptions

SOD-323 塑封封装 硅半导体二极管。
Silicon Diode in a SOD-323 Plastic Package.

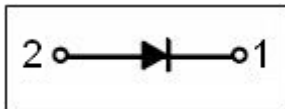
特征 / Features

开关速度快，符合 AEC-Q101 标准高可靠性要求，无卤产品。
Fast switching diodes, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

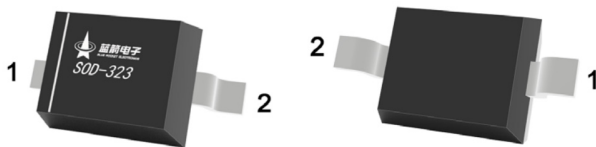
用途 / Applications

用于开关电路，满足汽车应用的严格要求。
Switching diodes, Meet the stringent requirements of automotive applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1: Cathode

PIN2: Anode

印章代码 / Marking

Marking	S4Q
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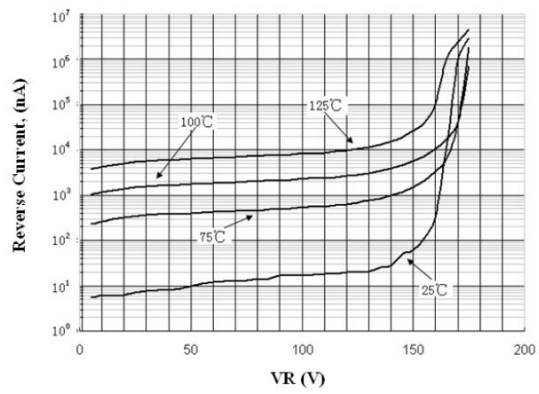
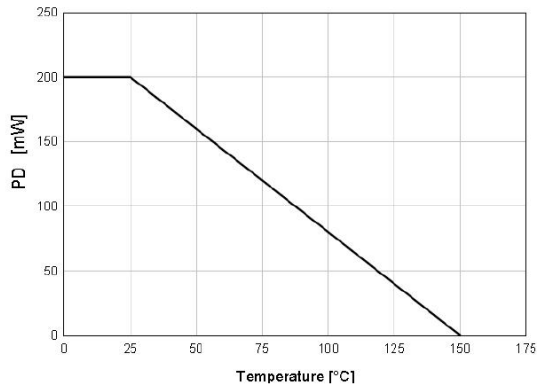
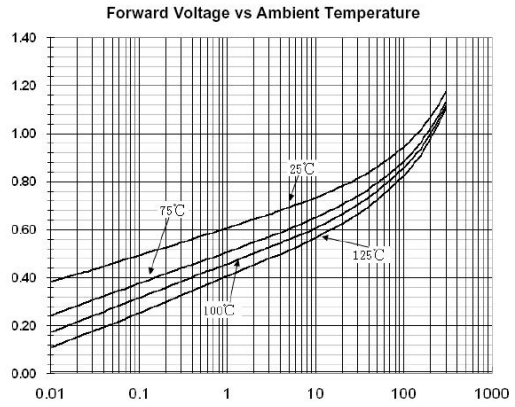
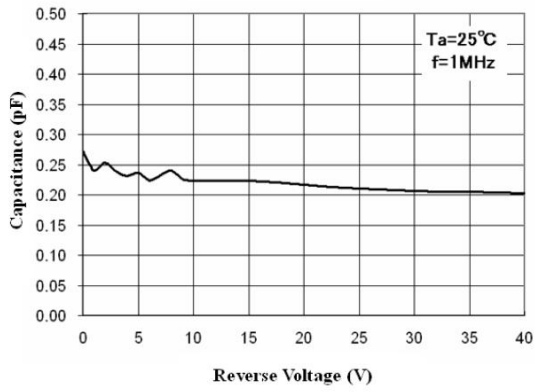
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Reverse Voltage	V_R	80	V
Peak Reverse Voltage	V_{RM}	90	V
Average Rectified Output Current	I_O	150	mA
Forward Continuous Current	I_{FM}	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM} (t=1.0\mu s)$	2.0	A
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65~150	°C

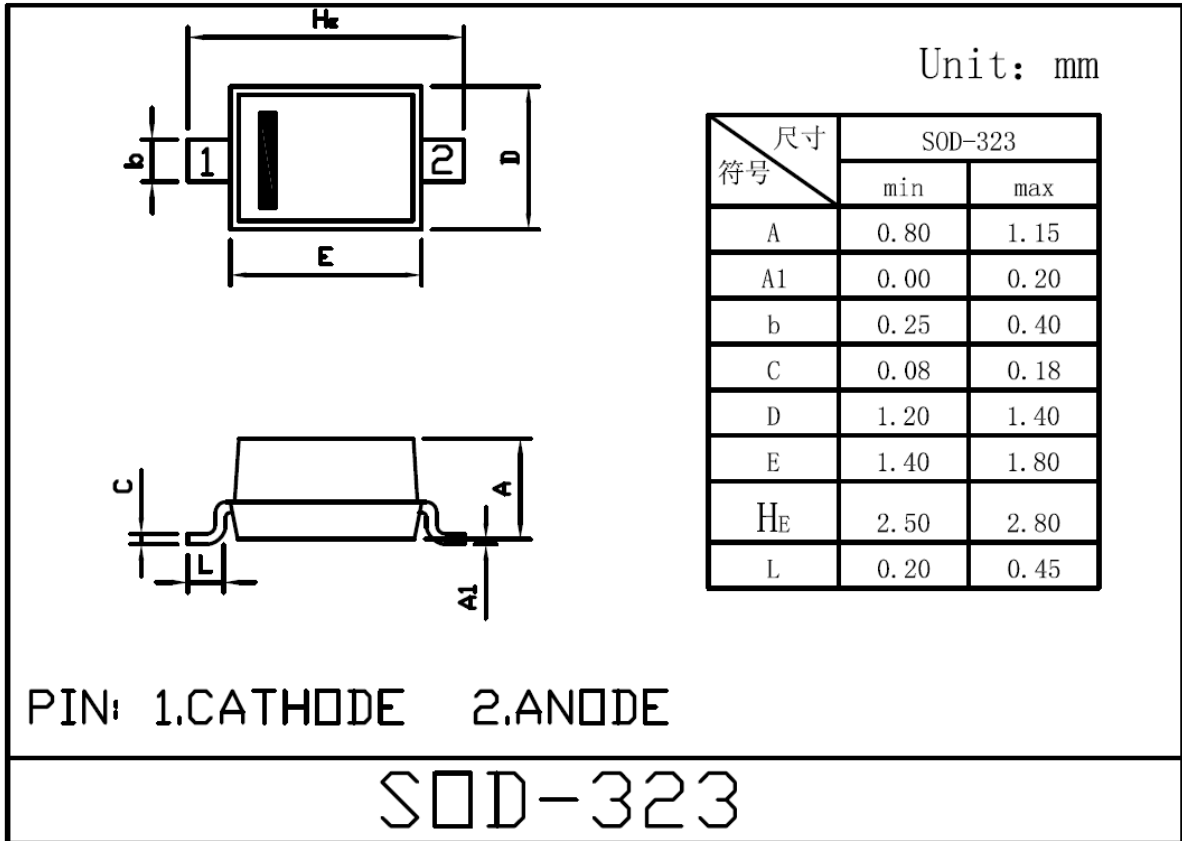
电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Forward Voltage	V_F	$I_F=100mA$			1.2	V
Reverse Leakage Current	I_R	$V_R=80V$			100	nA
Breakdown Voltage	V_{BR}	$I_R=100\mu A$	80			V
Reverse Recovery Time	t_{rr}	$I_F=10mA$ $R_L=100\Omega$			4.0	ns
Total Capacitance	C_T	$V_R=0.5V$ $f=1.0MHz$			4.0	pF

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

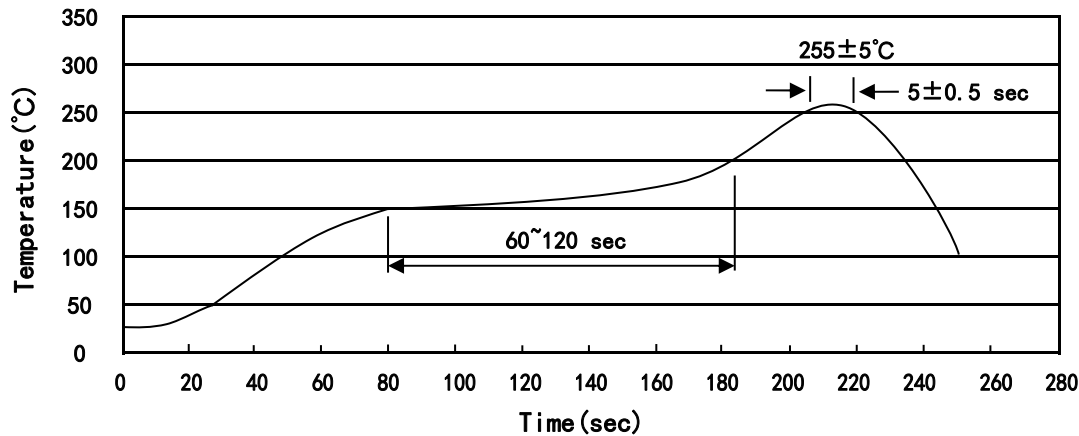
S4： 为型号代码

Q： 为汽车无卤产品标识

Note:

S4: Product Type Code

Q: Automobile halogen-free product 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 150~200°C，时间 60~120sec;
- 2、峰值温度 255±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:150~200°C, Time:60~120sec.
- 2.Peak Temp.:255±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