

BAT42WS-BAT43WS

Rev.F Mar.-2016

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

低正向压降, 快速切换。

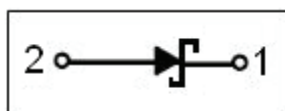
Low Forward Voltage Drop, Fast Switching.

用途 / Applications

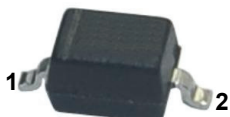
肖特基二极管。

Schottky diode.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1:Cathode

PIN2:Anode

放大及印章代码 / h_{FE} Classifications & Marking

Model	BAT42WS	BAT43WS
Marking	HS7	HS8

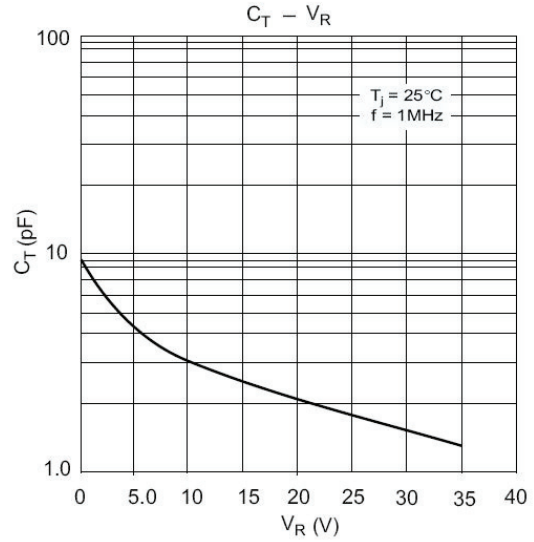
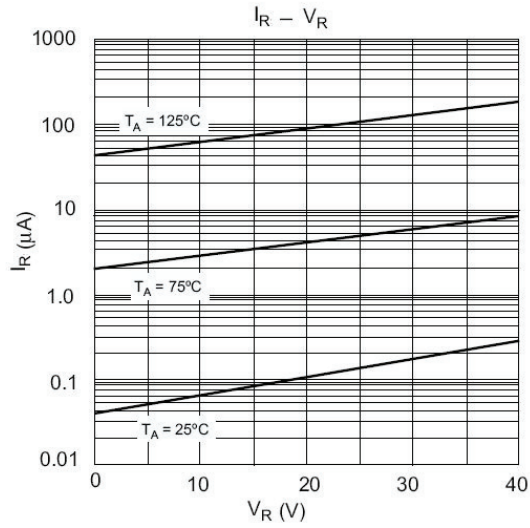
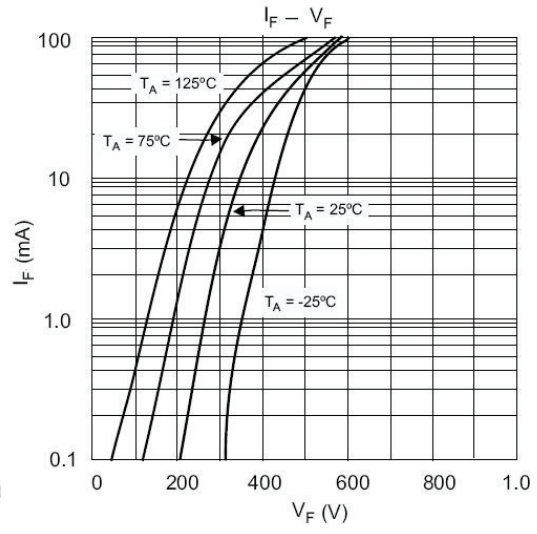
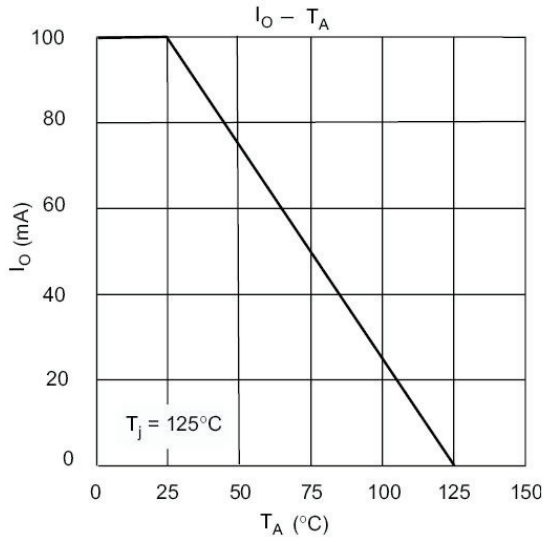
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Working Peak Reverse Voltage, DC Reverse Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Non-Repetitive Peak Forward Current	I_{FM}	200	mA
Output Current	I_O	100	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4.0	A
Power Dissipation	P_D	200	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to 125	°C

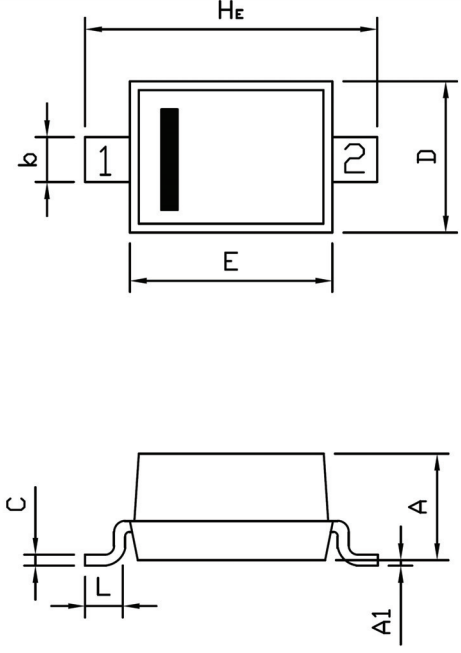
电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating		单位 Unit
			MIN	MAX	
Forward Voltage	$V_{(BR)}$	$I_R=100\mu A$	30		V
Peak Forward Voltage	V_{FM}	$I_F=2.0mA$	0.26	0.33	V
		$I_F=10mA$		0.40	V
		$I_F=15mA$		0.45	V
		$I_F=50mA$		0.65	V
		$I_F=200mA$		1.0	V
Instantaneous Reverse Current	I_{RM}	$V_R=25V$		500	nA
		$V_R=25V, T_J=100^\circ C$		100	μA
Total Capacitance	C_T	$V_R=1.0V, f=1.0MHZ$		10	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		5.0	ns

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



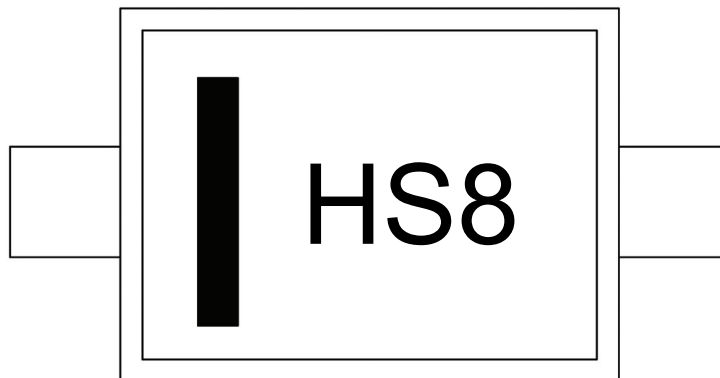
Unit: mm

尺寸 符号	SOD-323	
	min	max
A	0.90	1.10
A1	0.00	0.10
b	0.25	0.40
C	0.089	0.177
D	1.15	1.35
E	1.60	1.80
HE	2.30	2.70
L	0.20	0.40

PIN: 1.CATHODE 2.ANODE

SOD-323

印章说明 / Marking Instructions



说明：

H： 为公司代码

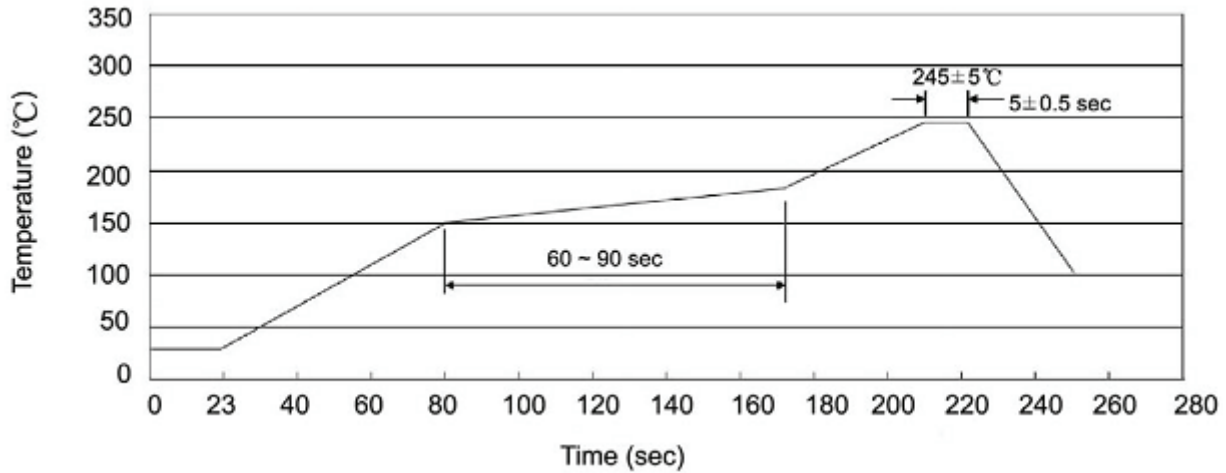
S8： 为型号代码

Note:

H: Company Code.

S8: Product Type.

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°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:25~150°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	8	240,000	7" ×8	180×120×180	385×257×392

使用说明 / Notices