BAS16

Rev.G Jun.-2020

描述 / Descriptions

SOT-23 塑封封装 硅半导体二极管。Silicon Diode in a SOT-23 Plastic Package.

特征 / Features

小信号二极管。无卤产品。

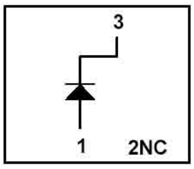
Small signal diode.HF Product.

用途 / Applications

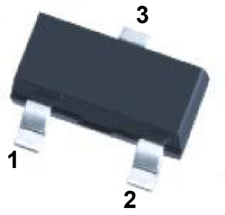
高导电率的超快速二极管。

High Conductance Ultra Fast Diode.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN: See Equivalent Circuit.

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

Marking	HA6

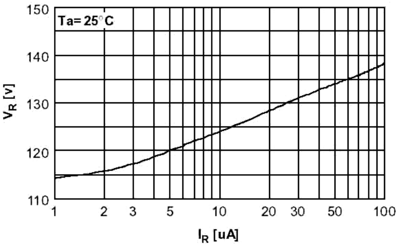
极限参数 / Absolute Maximum Ratings(Ta=25℃)

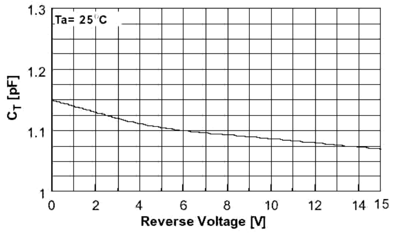
参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	85	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM(1)}$(PW=1S)	1.0	A
	$I_{FSM(2)}$(PW=1mS)	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance, Junction to Ambient	$R_{θJA}$	357	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

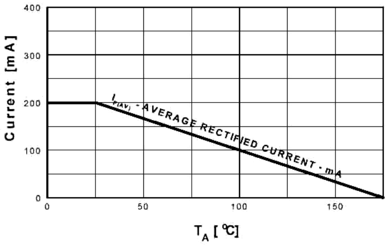
电性能参数 / Electrical Characteristics(Ta=25℃)

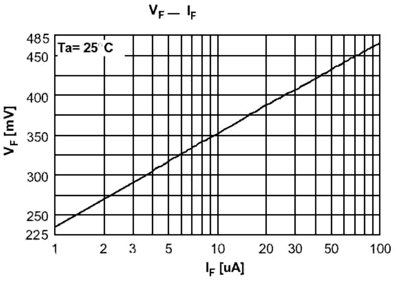
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Breakdown Voltage	V_R	I_R=5.0μA	85			V
Forward Voltage	V_F	I_F=1.0mA			715	mV
		I_F=10mA			855	mV
		I_F=50mA			1.0	V
		I_F=150mA			1.25	V
Instantaneous Reverse Current	I_R	V_R=75V			1.0	μA
		V_R=25V T_A=150℃			30	μA
		V_R=75V T_A=150℃			50	μA
Total Capacitance	C_T	V_R=0 f=1.0MHz			2.0	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA I_{RR}=1.0mA R_L=100Ω			6.0	ns

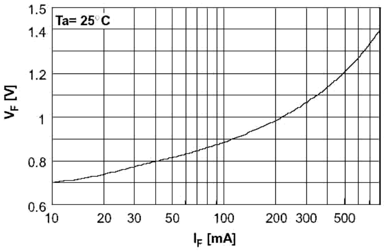
电参数曲线图 / Electrical Characteristic Curve

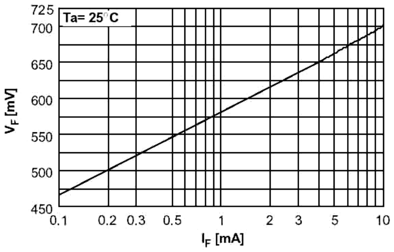


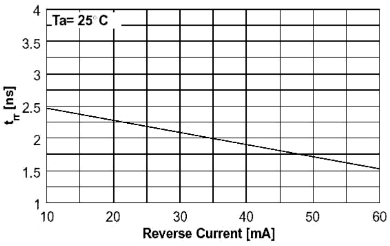


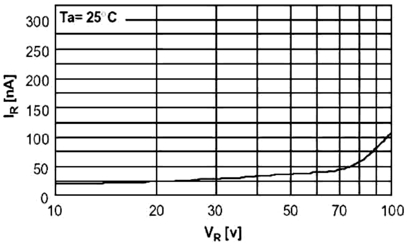


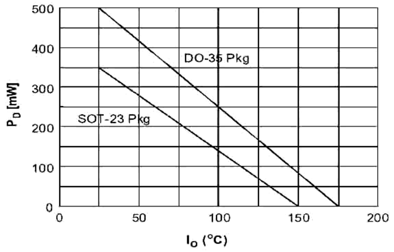






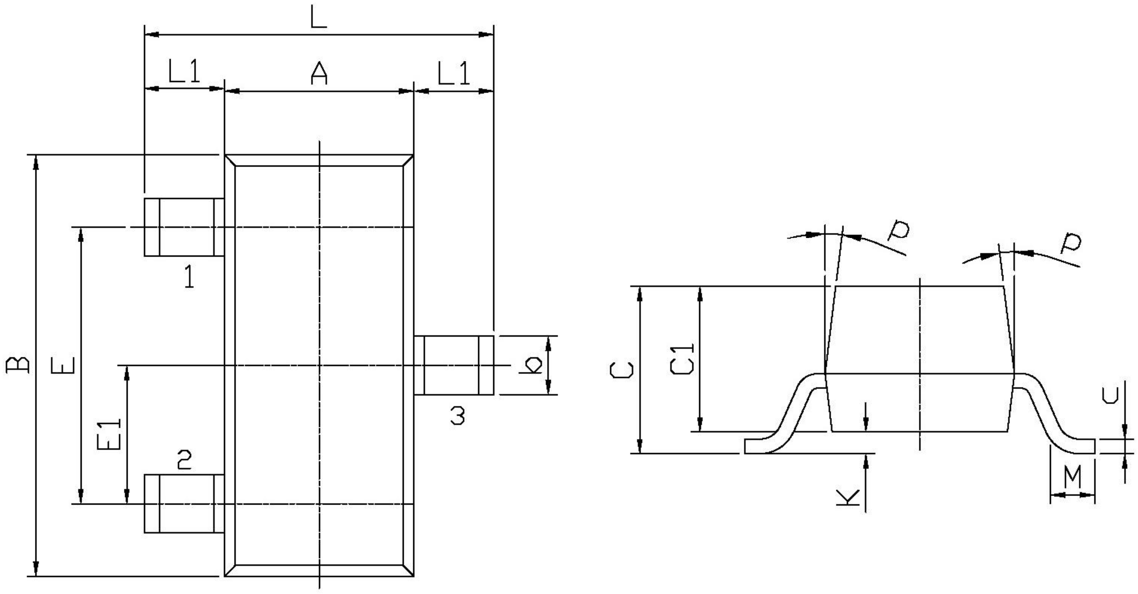






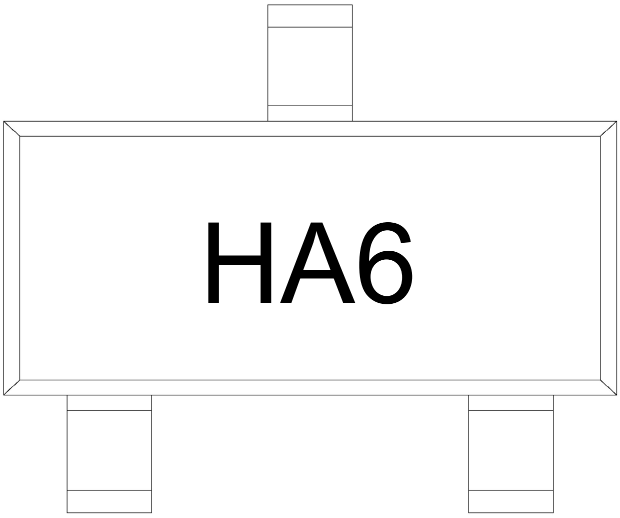
外形尺寸图 / Package Dimensions

SOT-23 单位：mm



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
B	2.70	3.10	K	0	0.10
E	1.70	2.10	M	0.20MIN	
E1	0.85	1.05	P	7°	
b	0.35	0.55			

印章说明　/　Marking Instructions



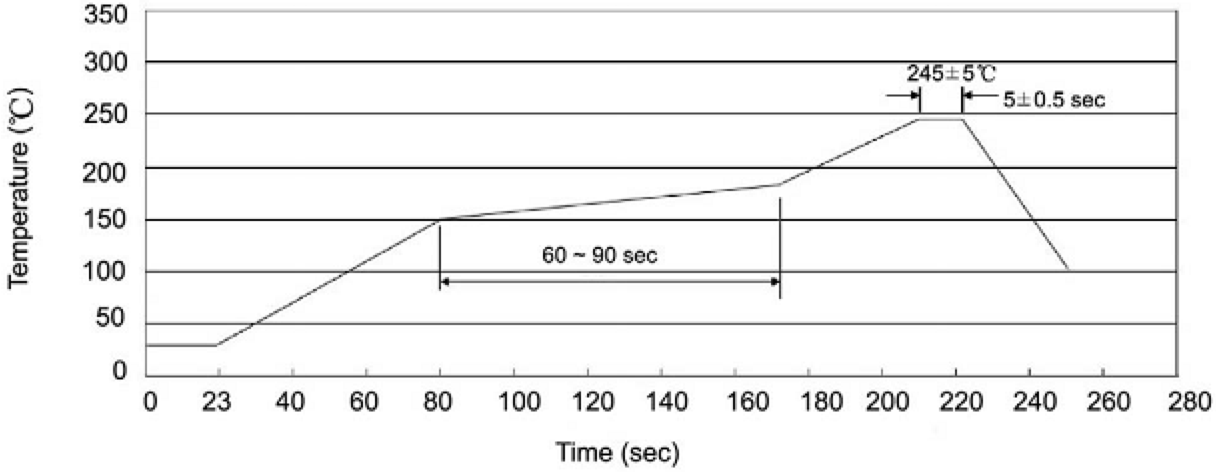
说明：

H：	为公司代码
A6：	为型号代码

Note:

H:	Company Code.
A6:	Product Type.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：	Note:
1、预热温度 25～150℃，时间 60～90sec;	1.Preheating:25~150℃, Time:60~90sec.
2、峰值温度 245±5℃，时间持续为 5±0.5sec;	2.Peak Temp.:245±5℃, Duration:5±0.5sec.
3、焊接制程冷却速度为 2～10℃/sec.	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^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
SOT-23	3,000	10	30,000	8	240,000	7″ ×8	180×120×180	385×257×392

使用说明 / Notices