

描述 / Descriptions

SOT-23 塑封封装 NPN 半导体三极管。Silicon NPN transistor in a SOT-23 Plastic Package.

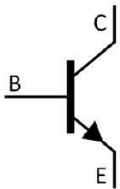
特征 / Features

P_C 大, h_{FE} 高且特性好, 与 9015MG 互补, 无卤产品。
High P_C and h_{FE} , excellent h_{FE} linearity, complementary pair with 9015MG, HF Product.

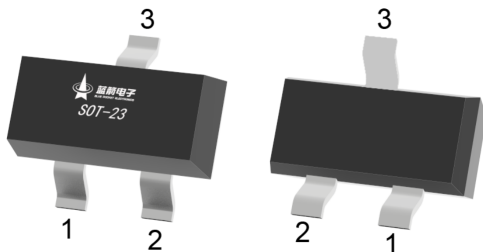
用途 / Applications

用于低电平、低噪声的前置放大器。
Low frequency, low noise pre-amplifier.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1 : Base PIN 2 : Emitter PIN 3 : Collector

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

h_{FE} Classifications Symbol	A	B	C	D
h_{FE} Range	60~150	100~300	200~600	400~1000
Marking	GJ6A	GJ6B	GJ6C	GJ6D

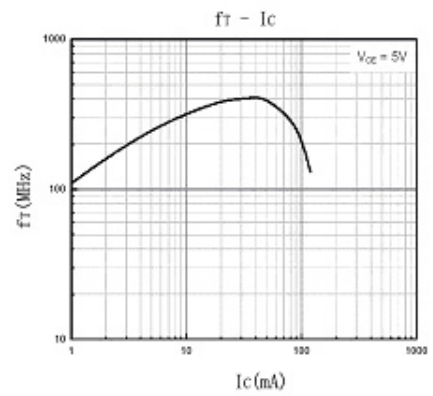
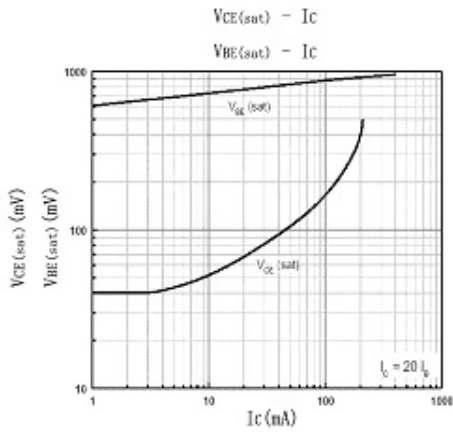
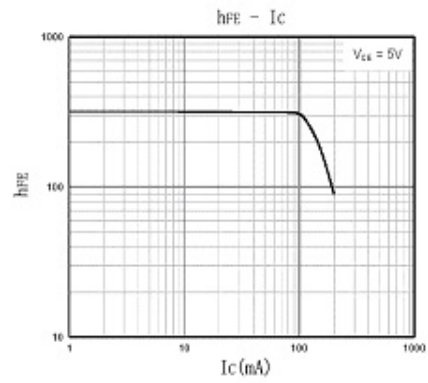
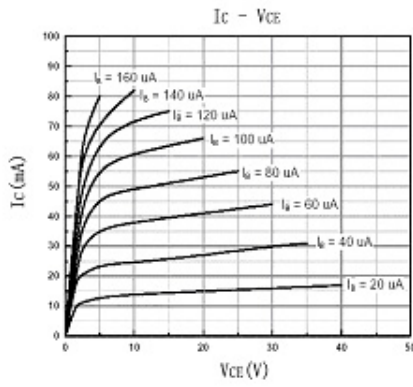
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V _{CBO}	50	V
Collector to Emitter Voltage	V _{CEO}	45	V
Emitter to Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	100	mA
Collector Power Dissipation	P _C	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55~150	°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
Collector to Base Breakdown Voltage	V _{CBO}	I _C =0.1mA I _E =0	50			V
Collector to Emitter Breakdown Voltage	V _{CEO}	I _C =1.0mA I _B =0	45			V
Emitter to Base Breakdown Voltage	V _{EBO}	I _E =0.1mA I _C =0	5.0			V
Collector Cut-Off Current	I _{CBO}	V _{CB} =50V I _E =0			0.05	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =5.0V I _C =0			0.05	μA
DC Current Gain	h _{FE}	V _{CE} =5.0V I _C =1.0mA	60		1000	
Collector-Emitter Saturation voltage	V _{CE(sat)}	I _C =100mA I _B =5.0mA		0.14	0.3	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =100mA I _B =5.0mA		0.84	1.0	V
Base-Emitter Voltage	V _{BE}	V _{CE} =5.0V I _C =2.0mA		0.63	0.7	V
Transition Frequency	f _T	V _{CE} =5.0V I _C =10mA	150	270		MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V I _E =0 f=1.0MHz		2.2	3.5	pF
Noise Figure	NF	V _{CE} =5.0V I _C =-0.2mA R _g =2.0KΩ f=1.0KHz Δf=200Hz		0.9	10	dB

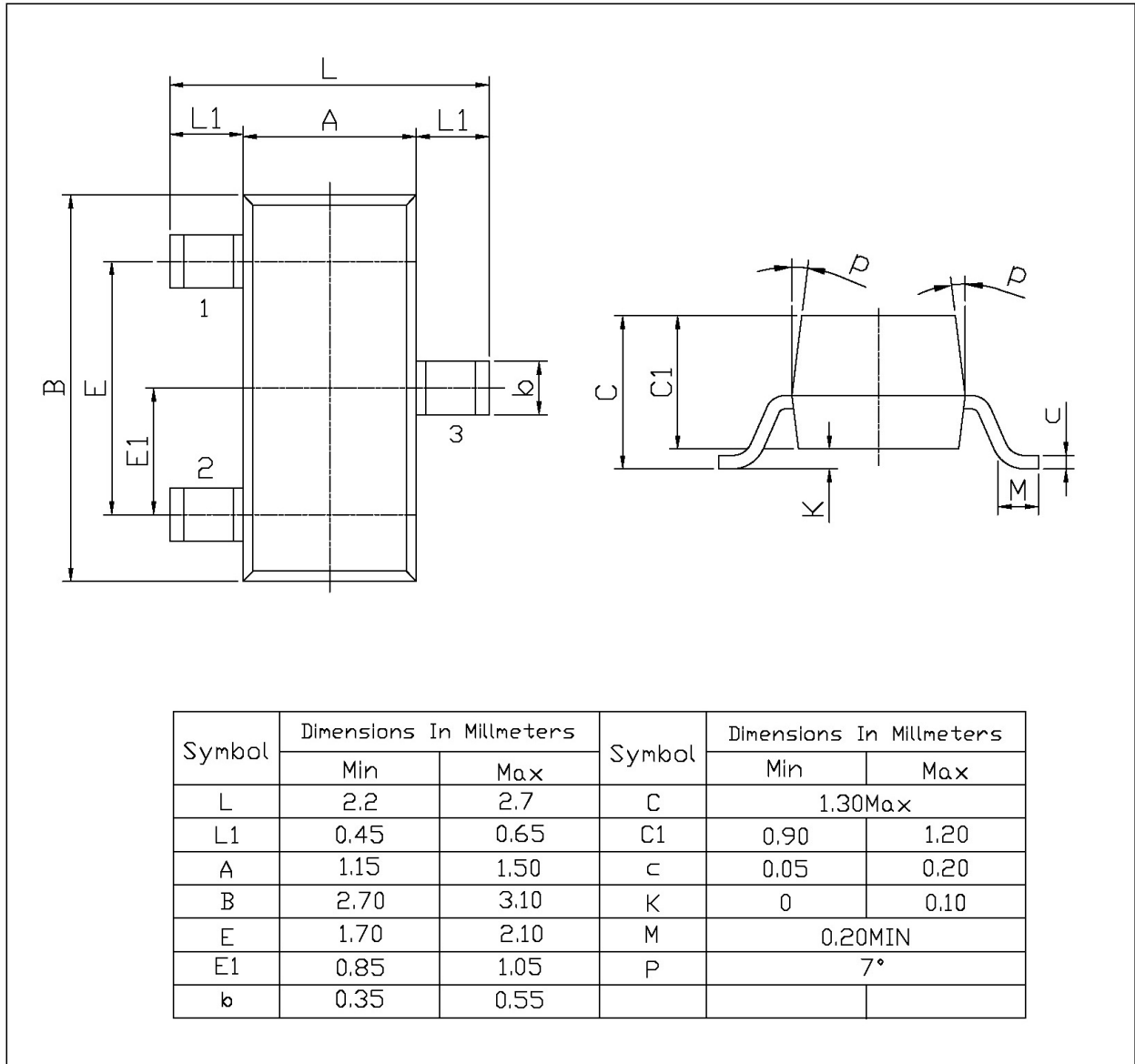
电参数曲线图 / Electrical Characteristic Curve



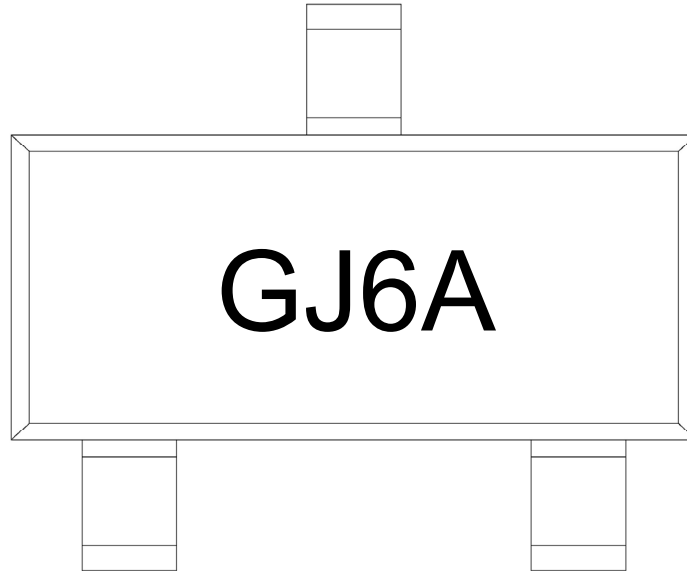
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

G： 为无卤产品代码

J6： 为型号代码

A： 为 h_{FE} 档次代码

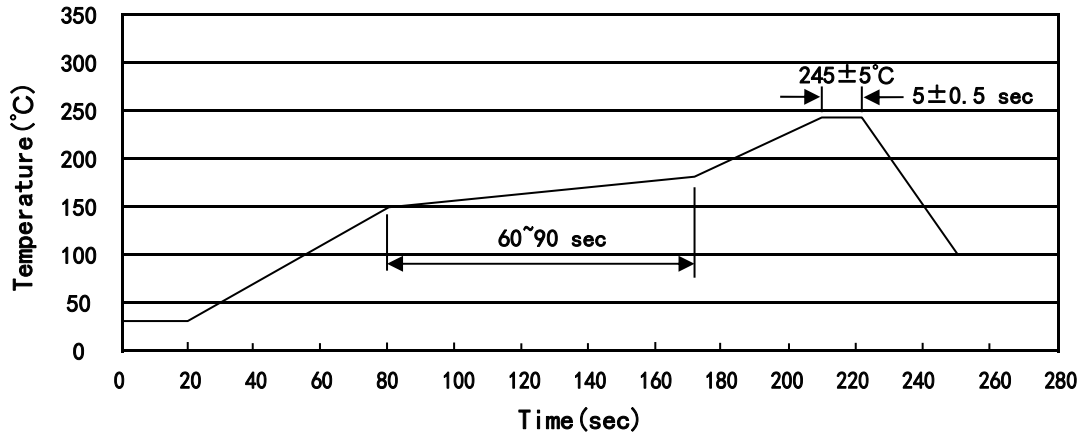
Note:

G： HF Product Code

J6： Product Type Code

A： h_{FE} Classifications Symbol 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
SOT-23	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices