

BC337M(BR3DG337M)

Rev.C Feb.-2015

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

大电流,与 BC327M(BR3CG327M)互补。

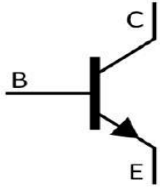
High current, complementary pair with BC327M(BR3CG327M).

用途 / Applications

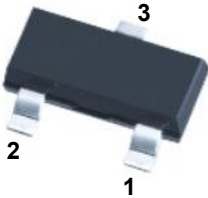
用于一般放大及开关线路。

General power amplifier and switching.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1 : Emitter

PIN 2 : Base

PIN 3 : Collector

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

h_{FE} Classifications Symbol	16	25	40
h_{FE} Range	100~250	160~400	250~600
Marking	H6C1	H6C2	H6C4

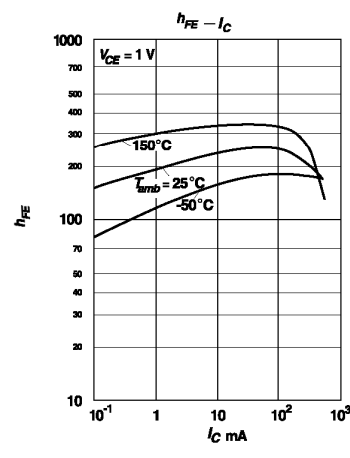
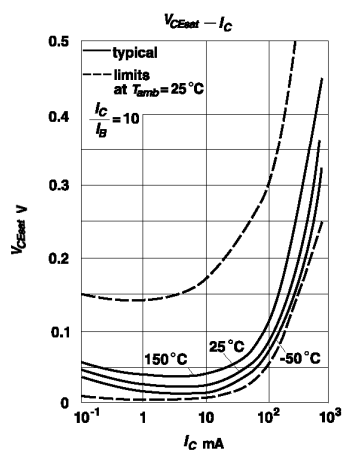
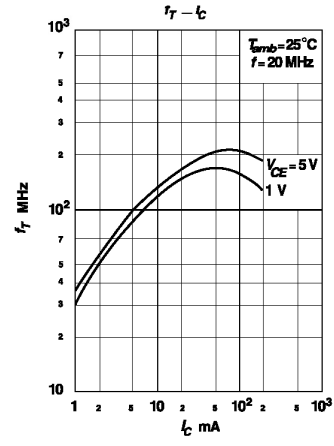
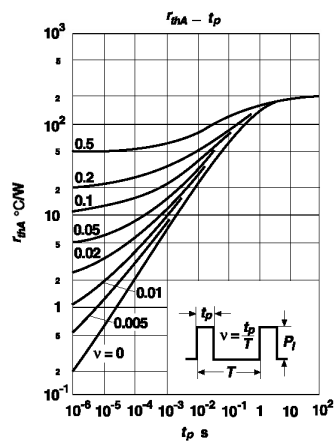
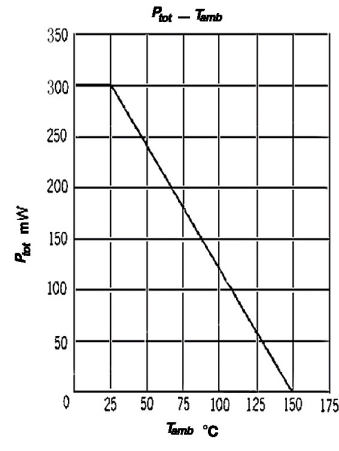
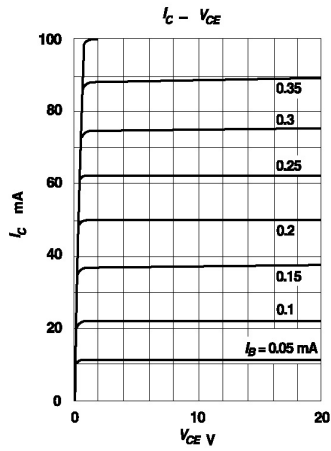
极限参数 / Absolute Maximum Ratings(Ta=25°C)

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 - Continuous	I_C	800	mA
Collector Emitter - Continuous	I_E	-800	mA
Collector Power Dissipation	P_C	300	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 Cut-Off Current	I_{CBO}	$V_{CB}=45V$ $I_E=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=1.0V$ $I_C=100mA$	100		600	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			0.7	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=1.0V$ $I_C=300mA$			1.2	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=10mA$ $f=100MHz$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$		12		pF

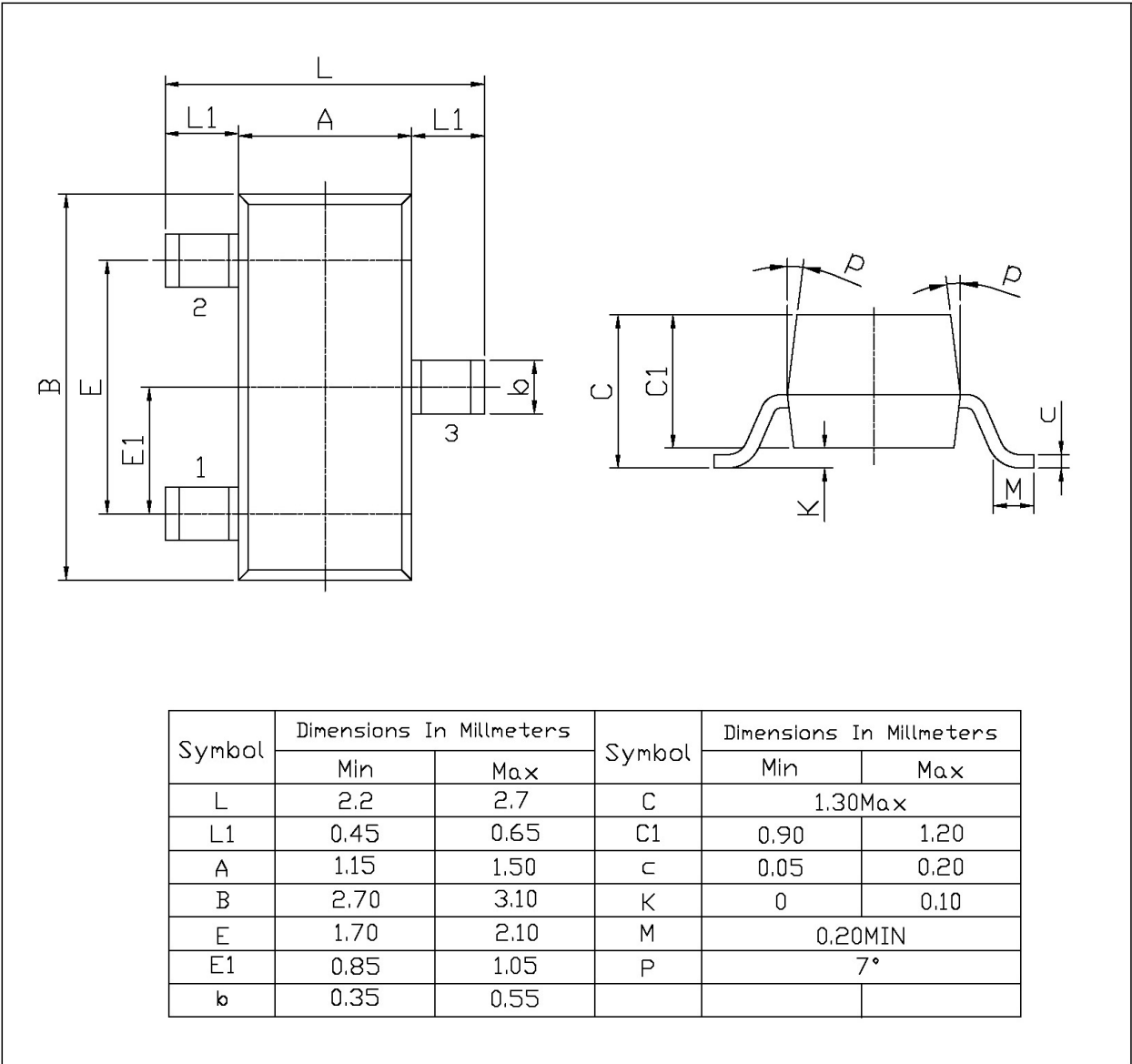
电参数曲线图 / Electrical Characteristic Curve



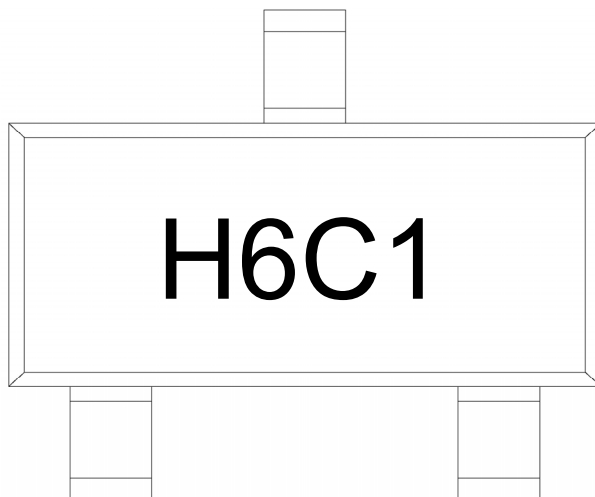
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

H： 为公司代码

6C1： 为型号代码

Note:

H: Company Code.

6C1: 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 $25 \sim 150^\circ\text{C}$ ，时间 $60 \sim 90\text{sec}$;
- 2、峰值温度 $245 \pm 5^\circ\text{C}$ ，时间持续为 $5 \pm 0.5\text{sec}$;
- 3、焊接制程冷却速度为 $2 \sim 10^\circ\text{C}/\text{sec}$ 。

Note:

- 1.Preheating: $25 \sim 150^\circ\text{C}$, Time: $60 \sim 90\text{sec}$.
- 2.Peak Temp.: $245 \pm 5^\circ\text{C}$, Duration: $5 \pm 0.5\text{sec}$.
3. Cooling Speed: $2 \sim 10^\circ\text{C}/\text{sec}$.

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

温度： $270 \pm 5^\circ\text{C}$

时间： 10 ± 1 sec.

Temp.: $270 \pm 5^\circ\text{C}$

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	8	240,000	7" x8	180x120x180	385x257x392

使用说明 / Notices