描述 / Descriptions

SOT-363 塑封封装双 PNP 半导体三极管。Double silicon PNP transistor in a SOT-363 Plastic Package.

特征 / Features

高电压,与 BRDBC847 互补，无卤产品。

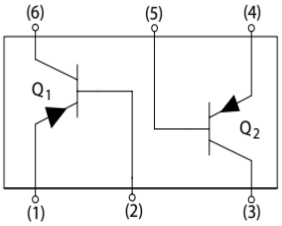
High voltage, complementary pair with BRDBC847,HF Product.

用途 / Applications

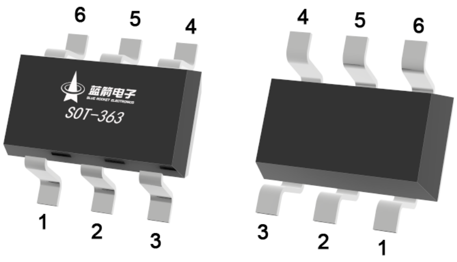
用于普通高压放大。

General purpose high voltage amplifier.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1、4：Emitter PIN 2、5：Base PIN 3、6：Collector

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

h_{FE} Classifications Symbol	A	B	C
h_{FE} Range	125～250	220～475	420～800
Marking	3E	3F	3G

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

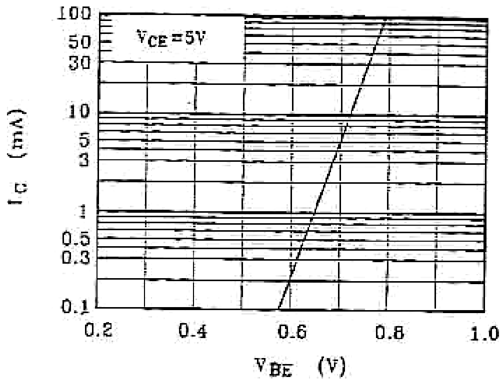
参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-100	mA
Total Package Dissipation	P_D	380	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	328	℃/W
Junction Temperature	T_j	-55～+150	℃
Storage Temperature Range	T_{stg}	-55～+150	℃

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

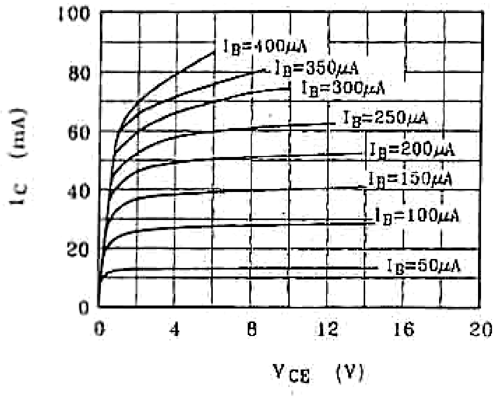
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector−Base Breakdown Voltage	V_{CBO}	I_C =-10μA I_E=0	-50			V
Collector−Emitter Breakdown Voltage	V_{CEO}	I_C =-10mA I_B = 0	-45			V
Emitter−Base Breakdown Voltage	V_{EBO}	I_E =-10μA I_C = 0	-5.0			V
Collector−Emitter Breakdown Voltage	V_{CES}	I_C=-10μA V_{EB}=0	50			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-15	nA
		V_{CB}=-30V I_E=0 T_A=150℃			-4.0	μA
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-10μA		150		
		V_{CE}=-5.0V I_C=-2.0mA	125		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-10mA I_B=-0.5mA			-0.30	V
		I_C=-100mA I_B=-5.0mA			-0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-10mA I_B=-0.5mA		-0.70		V
		I_C=-100mA I_B=-5.0mA		-0.90		V
Base–Emitter Voltage	$V_{BE(on)}$	I_C=-2.0mA V_{CE}=-5.0V	-0.60		-0.75	V
		I_C=-10mA V_{CE}=-5.0V			-0.82	V
Transition Frequency	f_T	V_{CE}=-5.0V I_C=-10mA f=100MHz	100			MHz
Output Capacitance	C_{ob}	V_{CB}=-10V f=1.0MHz			4.5	pF
Noise Figure	NF	I_C=-0.2mA V_{CE}=-5.0V R_S=2.0kΩ f=1.0kHz BW=200Hz			10	dB

电参数曲线图 / Electrical Characteristic Curve

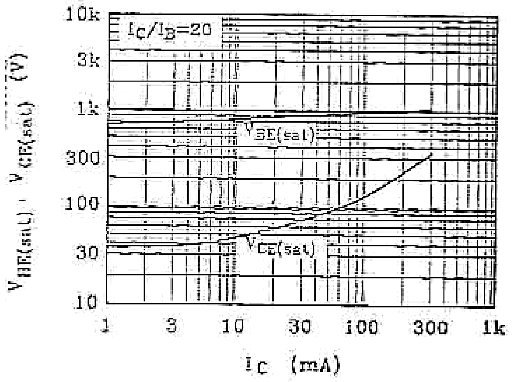
I_C – V_{BE}



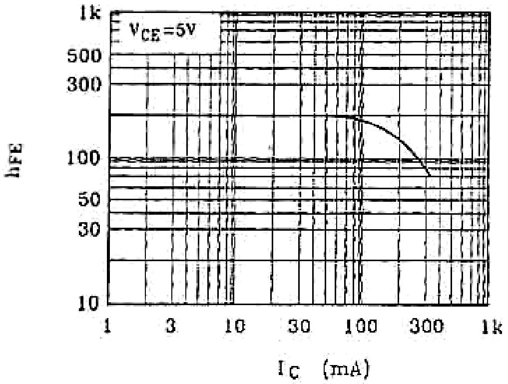
I_C – V_{CE}



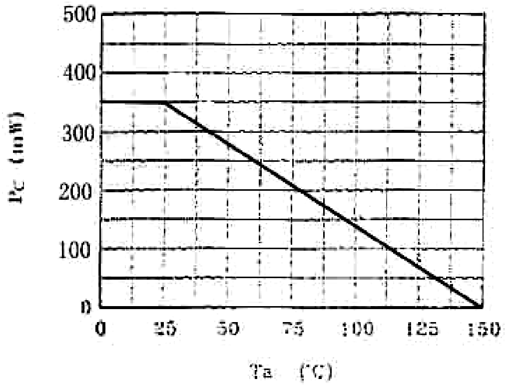
$V_{BE(sat)}$, $V_{CE(sat)}$ – I_C



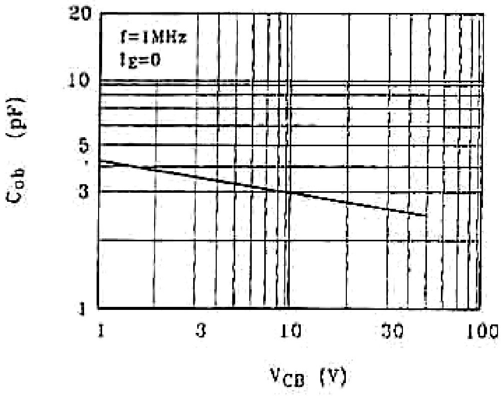
h_{FE} – I_C



P_C – Ta

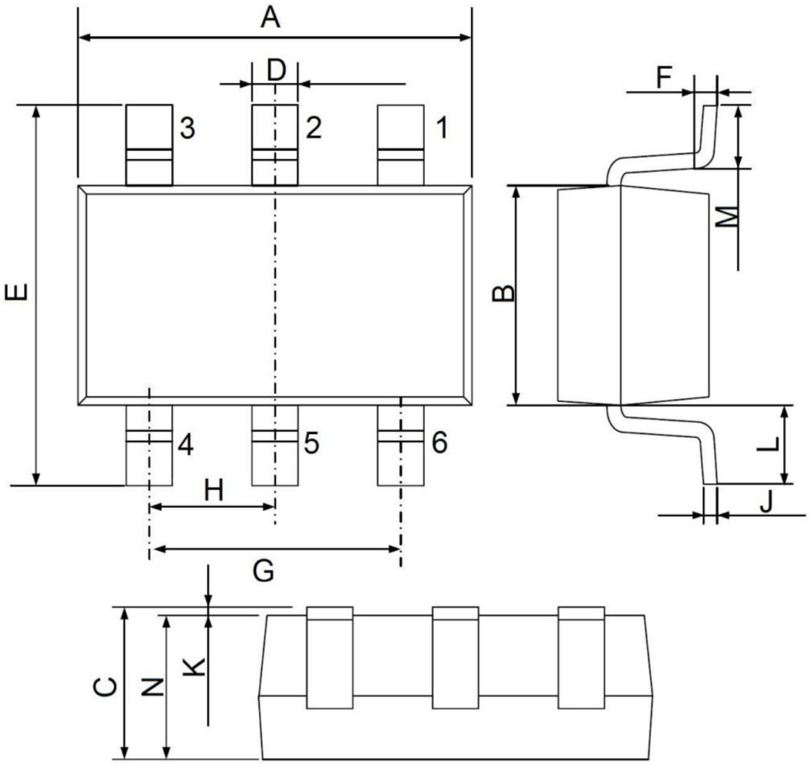


C_{ob} – V_{CB}



外形尺寸图 / Package Dimensions

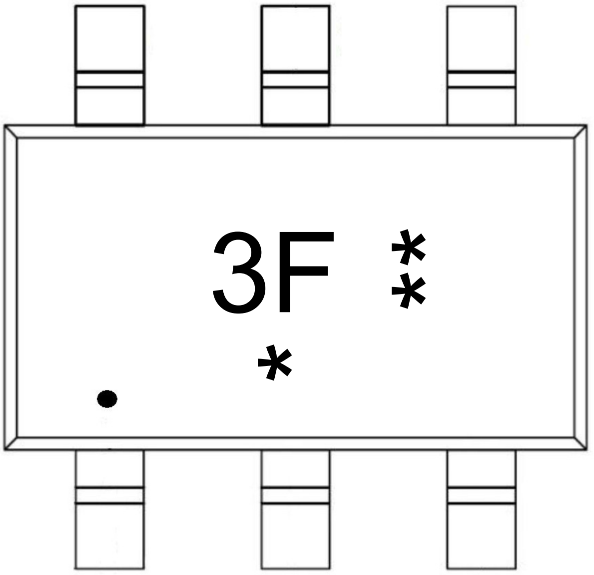
SOT-363-6L



UNIT: mm

DIM	MIN	MAX
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	1.95	2.25
F	0.20 Typ.	
G	1.20	1.40
H	0.65 Typ.	
J	0.08	0.15
K	0.00	0.10
L	0.525 Ref.	
M	0.26	0.46
N	0.90	1.10

印章说明 / Marking Instructions



说明：

● ： 为“1”脚

3 ： 为型号代码

F ： 为 h_{FE} 档次代码

*** ： 为生产批号代码，随生产批号变化

Note:

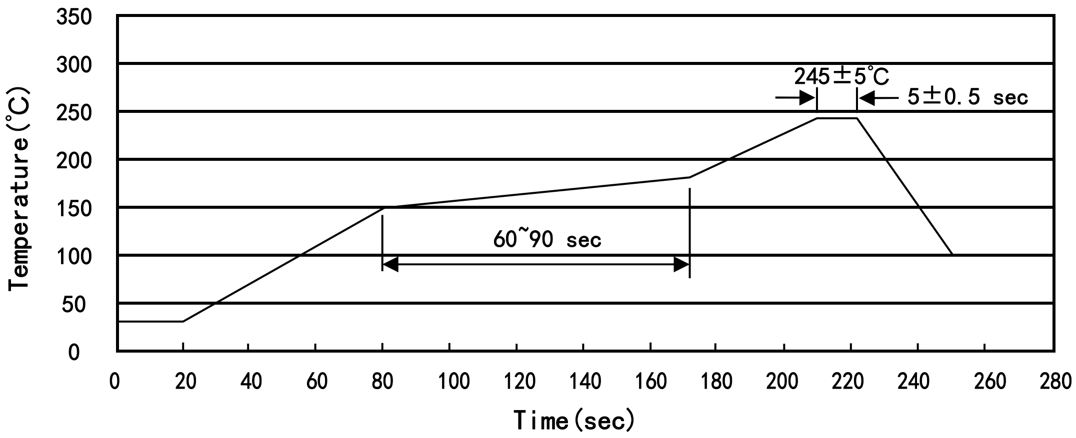
● ： “1” Pin

3 ： Product Type Code

F ： h_{FE} Classifications Symbol Code

*** ： Lot No. Code, code change with Lot No

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 150～180℃，时间 60～90sec;	1.Preheating:150~180℃, 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-363	3,000	10	30,000	6	180,000	7″ ×8	180×120×180	390×385×205

使用说明 / Notices