S8550M

Rev.F Apr.-2017

描述 / Descriptions

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

特征 / Features

与 S8050M 互补。

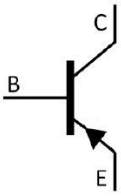
Complementary pair with S8050M.

用途 / Applications

用于功率放大电路。

Power amplifier applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning

PIN1：Base PIN 2： Emitter PIN 3：Collector

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

h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	85～160	120～200	160～300
Marking	HY4B	HY4C	HY4D

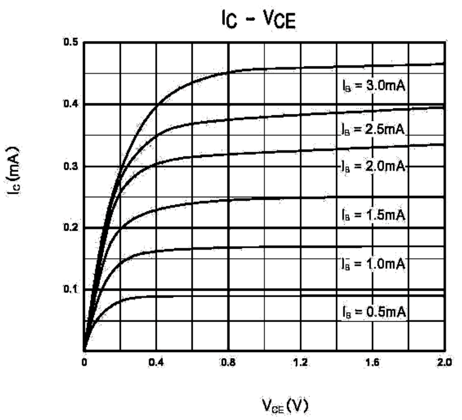
极限参数 / Absolute Maximum Ratings(Ta=25℃)

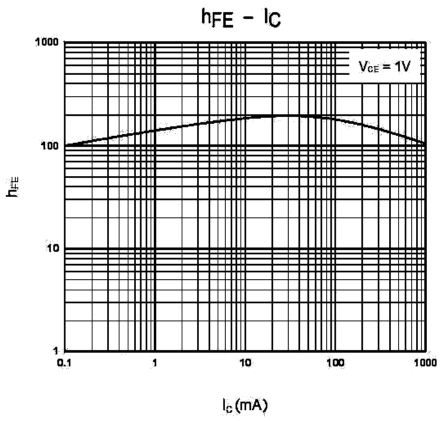
参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-25	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current	I_C	-800	mA
Base Current	I_B	-200	mA
Collector Power Dissipation	P_C	450	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-65～150	℃

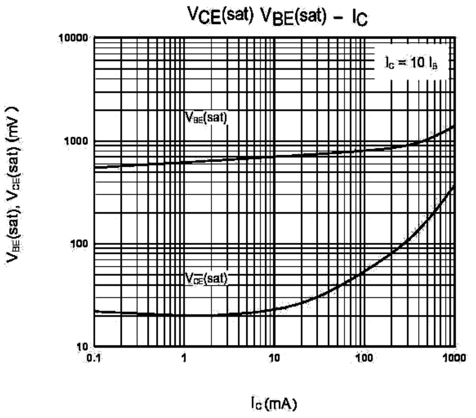
电性能参数 / Electrical Characteristics(Ta=25℃)

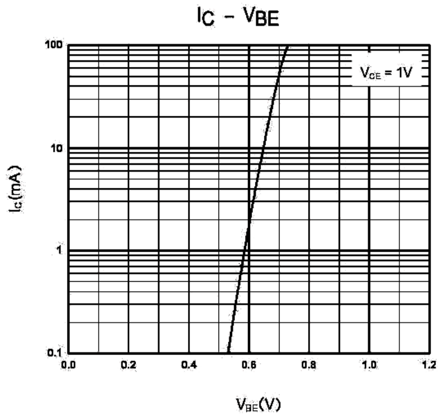
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-0.1mA I_E=0	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-2.0mA I_B=0	-25			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-0.1mA I_C=0	-6.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-35V I_E=0			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-6.0V I_C=0			-0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-1.0V I_C=-100mA	85		300	
	$h_{FE(2)}$	V_{CE}=-1.0V I_C=-500mA	40			
	$h_{FE(3)}$	V_{CE}=-1.0V I_C=-5.0mA	45			
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-500mA I_B=-50mA		-0.28	-0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-500mA I_B=-50mA		-0.98	-1.2	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-1.0V I_C=-10mA		-0.66	-1.0	V
Transition Frequency	f_T	V_{CE}=-10V I_C=-50mA	100	200		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		15		pF

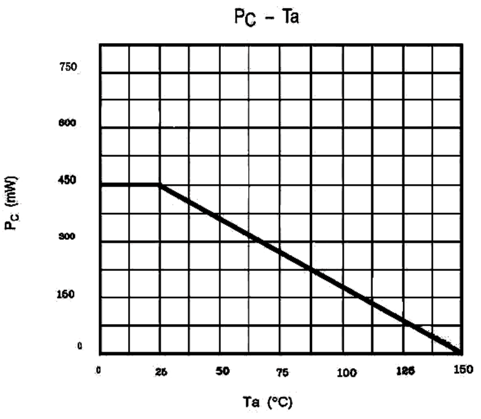
电参数曲线图 / Electrical Characteristic Curve

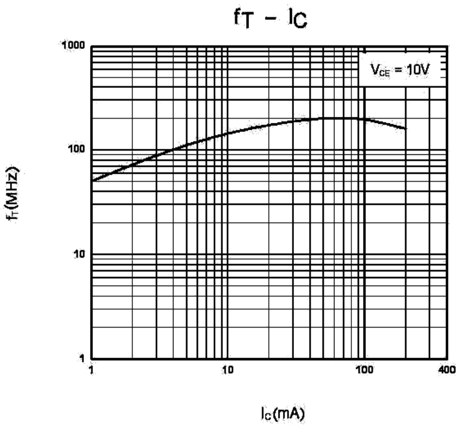






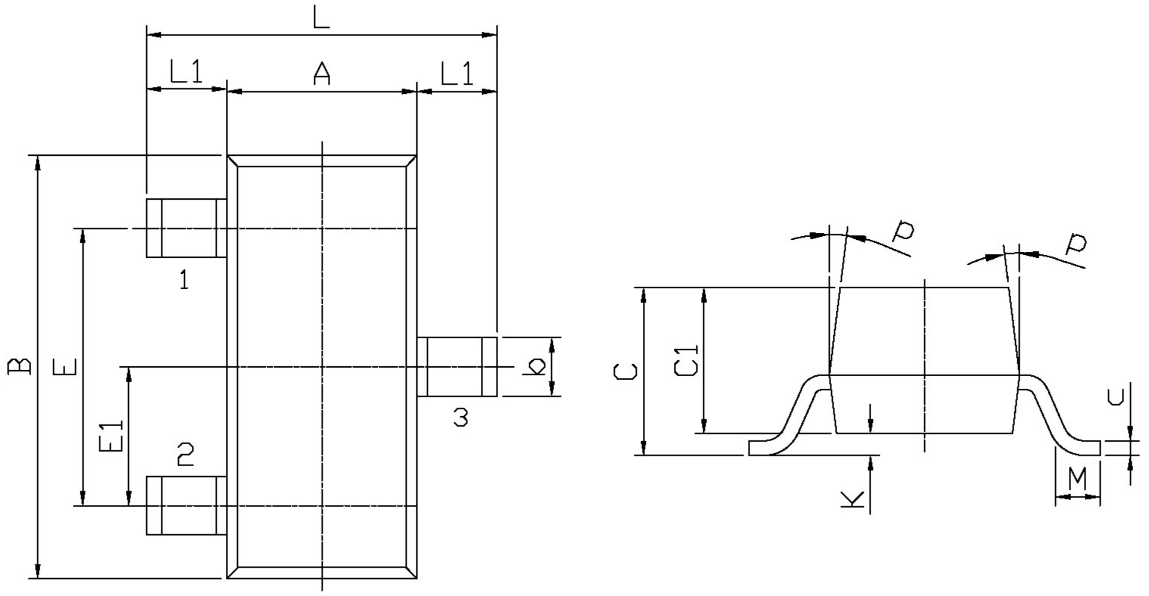






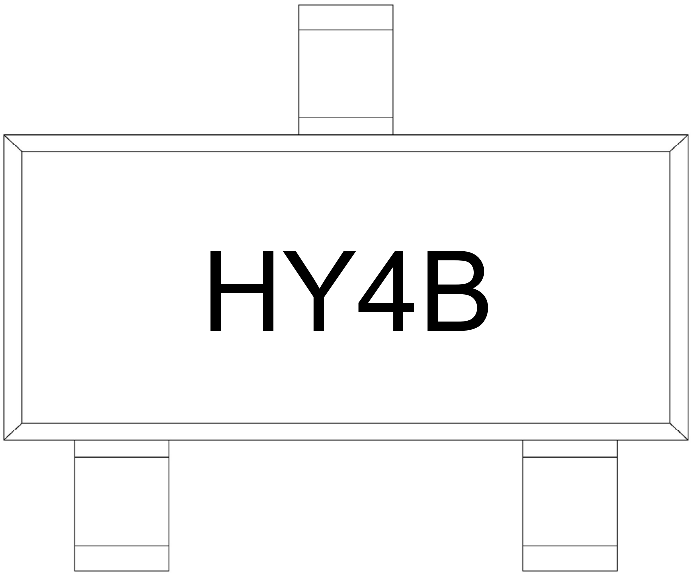
外形尺寸图 / Package Dimensions

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

Y4： 为型号代码

B： 为 h_{FE} 档次代码

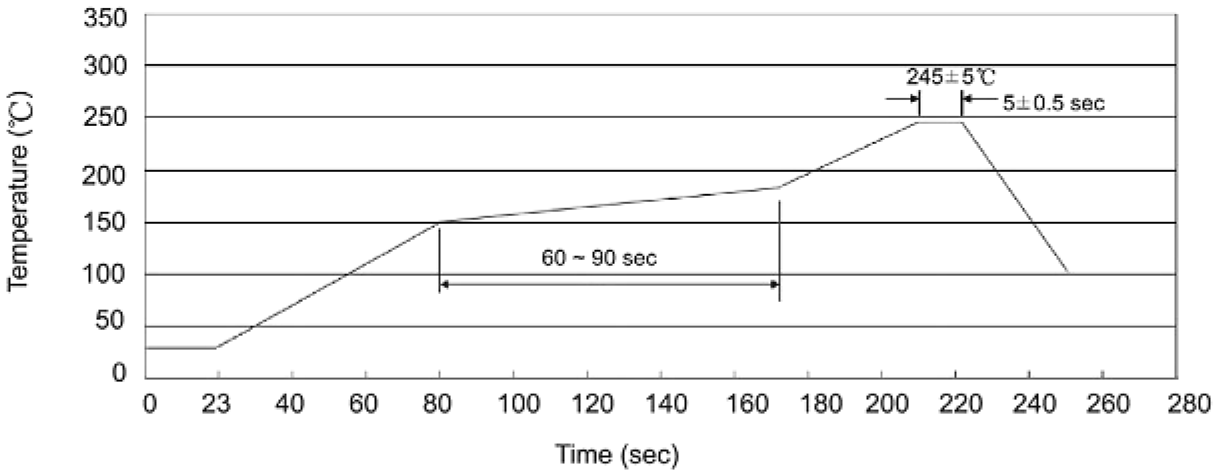
Note:

H： Company Code

Y4： Product Type Code

B： 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 25 ~ 150℃，时间 60 ~ 90sec;

2、峰值温度 245±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2 ~ 10℃/sec.

Note:

1.Preheating:25~150℃, Time:60~90sec.

2.Peak Temp.:245±5℃, Duration:5±0.5sec.

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	6	180,000	7″ ×8	180×120×180	390×385×205

使用说明 / Notices