

# PBSS5160T

Rev.E Mar.-2016

## 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

饱和压降低，电流大。

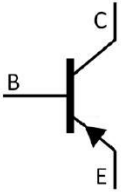
Low  $V_{CE(sat)}$ , high current.

## 用途 / Applications

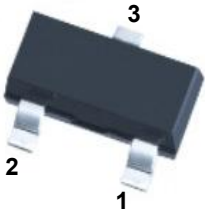
用于一般静音开关，液晶显示器的背景照明，线性开关电源。

General purpose switching and muting, LCD back-lighting, supply line switching circuits.

## 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

$h_{FE}$ Range	>150
Marking	HU6

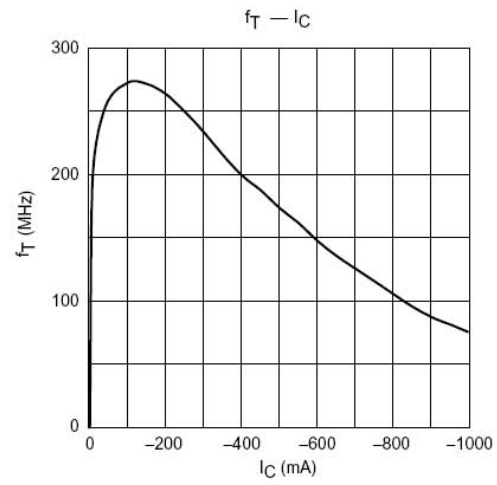
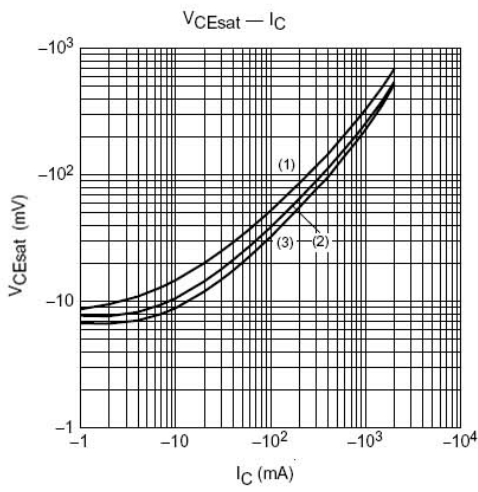
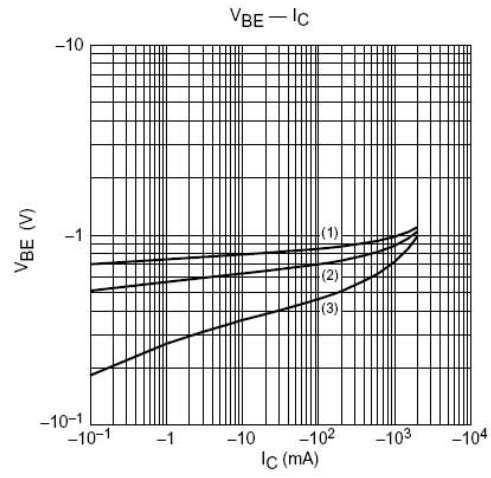
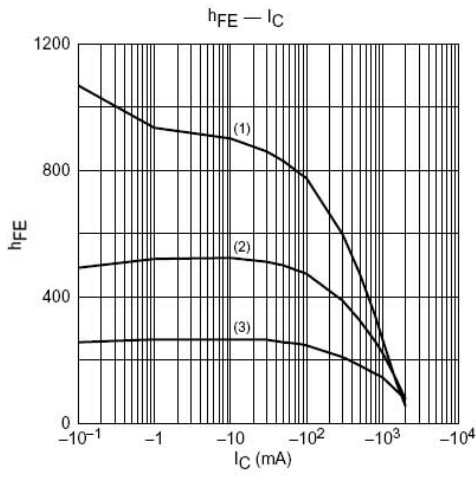
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	$V_{CBO}$	-80	V
Collector to Emitter Voltage	$V_{CEO}$	-60	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-1	A
Peak Collector Current	$I_{CM}$	-2	A
Base Current	$I_B$	-0.3	A
Peak Base Current	$I_{BM}$	-1	A
Total Power Dissipation	$P_C$	400	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	$I_{CBO}$	$V_{CB}=-60V$ $I_E=0A$			-100	nA
		$V_{CB}=-60V$ $I_E=0A$ $T_j=150^\circ C$			-50	$\mu A$
Collector-Emitter Cut-Off Current	$I_{CES}$	$V_{CE}=-60V$ $V_{BE}=0V$			-100	nA
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-5V$ $I_C=0A$			-100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-5V$ $I_C=-500mA$	150	250		
	$h_{FE(2)}$	$V_{CE}=-5V$ $I_C=-1mA$	200	350		
	$h_{FE(3)}$	$V_{CE}=-5V$ $I_C=-1A$	100	160		
Collector-Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-100mA$ $I_B=-1mA$		-110	-160	mV
	$V_{CE(sat)(2)}$	$I_C=-500mA$ $I_B=-50mA$		-120	-175	mV
	$V_{CE(sat)(3)}$	$I_C=-1A$ $I_B=-100mA$		-220	-330	mV
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-1A$ $I_B=-50mA$		-0.95	-1.1	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=-5V$ $I_C=-1A$		-0.82	-0.9	V
Transition Frequency	$f_T$	$V_{CE}=-10V$ $f=100MHz$ $I_C=-50mA$	150	220		MHz
Collector Capacitance	$C_C$	$V_{CB}=-10V$ $I_E=0A$ $f=1MHz$		9	15	pF

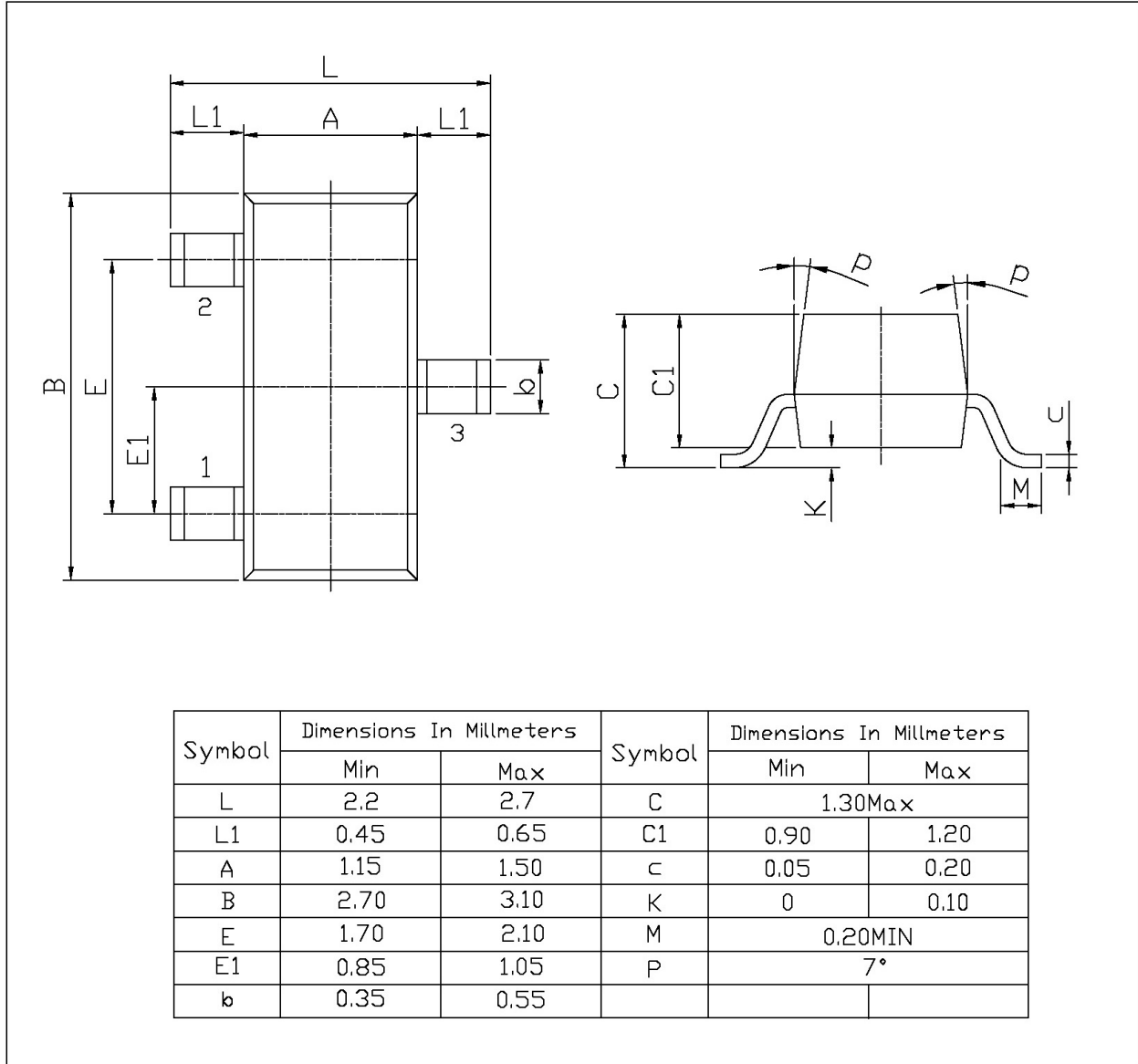
电参数曲线图 / Electrical Characteristic Curve



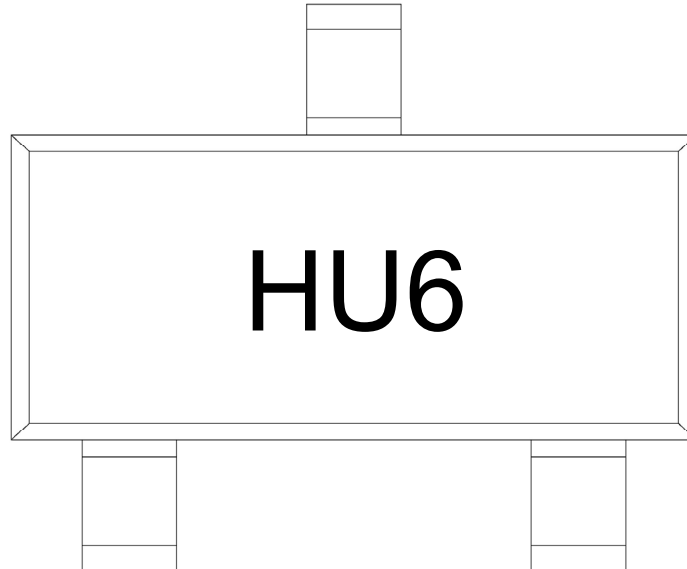
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



**印章说明 / Marking Instructions**



说明：

H： 为公司代码

U6： 为型号代码

Note:

H： Company Code

U6： Product Type 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°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:25~150°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 <sup>3</sup> )		
	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	180×120×180	385×257×392

**使用说明 / Notices**