



## PBSS5160T

### Descriptions

Silicon PNP transistor in a SOT-23 Plastic Package.

### Features

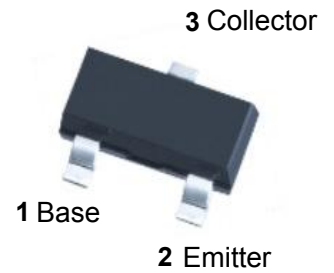
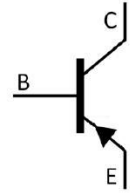
Low  $V_{CE(sat)}$ , high current.

### Applications

General purpose switching and muting

LCD back-lighting

Supply line switching circuits.



SOT23

### $h_{FE}$ Classifications & Marking

$h_{FE}$ Range	>150
Marking	HU6



## Absolute Maximum Ratings(Ta=25°C)

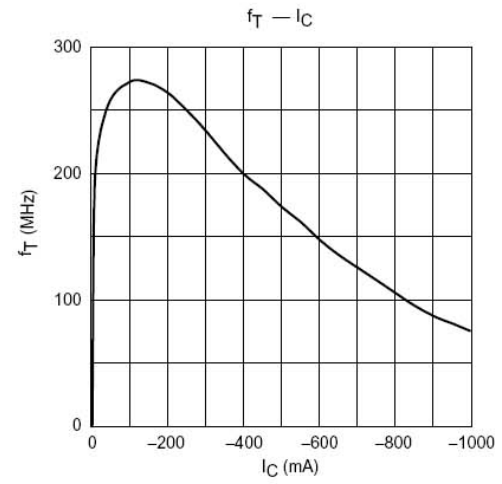
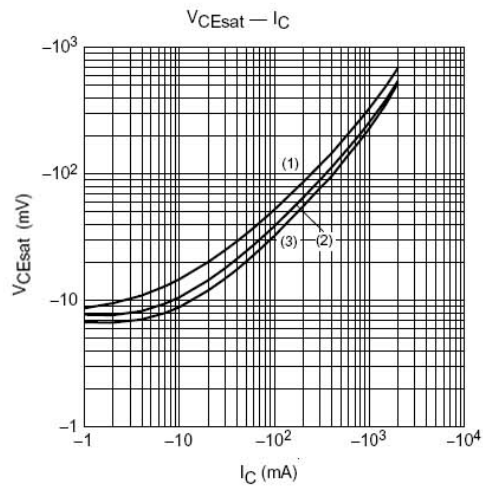
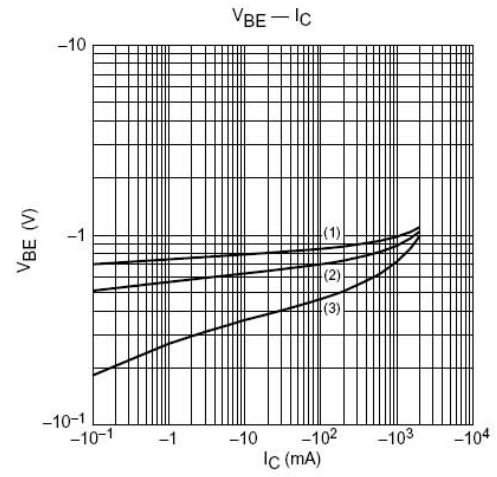
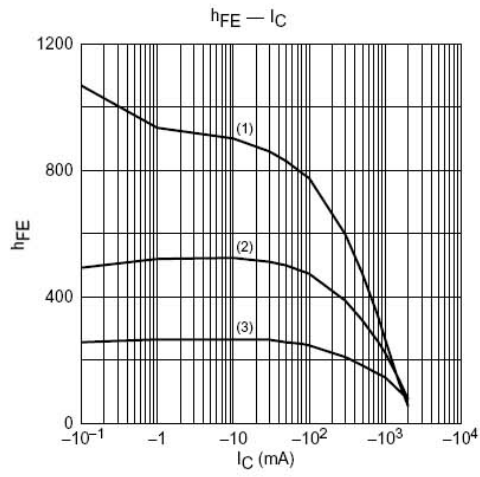
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-80	V
Collector to Emitter Voltage	$V_{CEO}$	-60	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-1	A
Peak Collector Current	$I_{CM}$	-2	A
Base Current	$I_B$	-0.3	A
Peak Base Current	$I_{BM}$	-1	A
Total Power Dissipation	$P_C$	400	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

## Electrical Characteristics(Ta=25 °C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	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



## Electrical Characteristic Curve

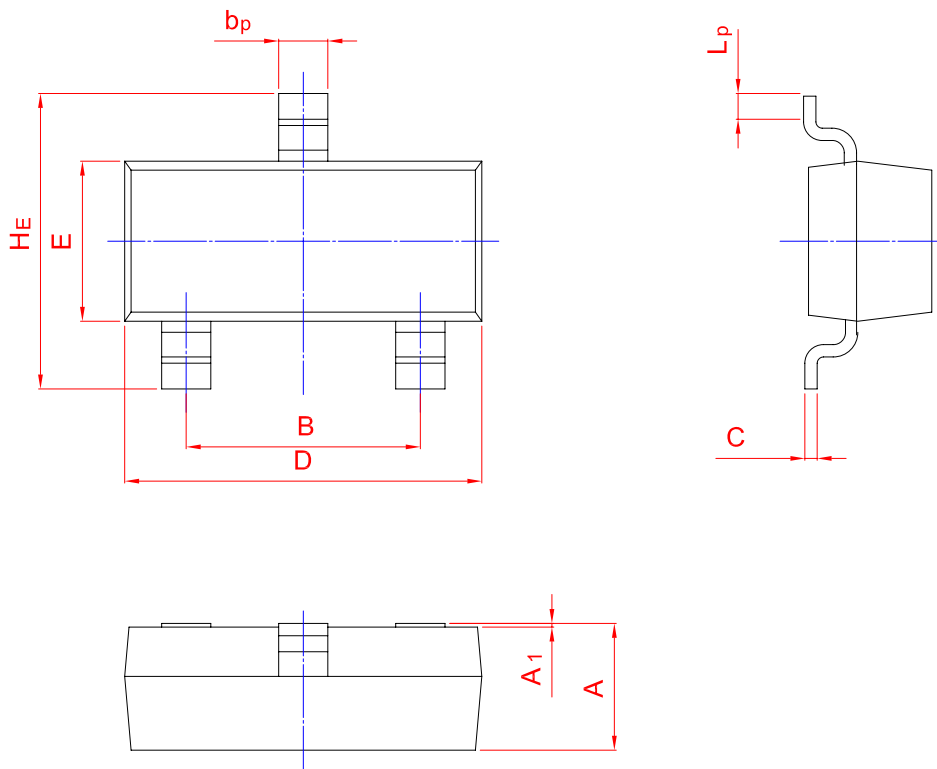
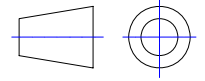




## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20