

### / Descriptions

Silicon PNP transistor in a TO-92 Plastic Package.

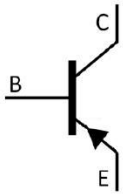
### / Features

High  $P_C$  and  $I_C$ , complementary pair with S8050.

### / Applications

Amplifier of portable radios in class B push-pull operation.

### / Equivalent Circuit



### / Pinning



PIN 1 Collector      PIN 2 Base      PIN 3 Emitter

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

$h_{FE}$ Classifications Symbol	B	C	D
$h_{FE}$ Range	85~160	120~200	160~300

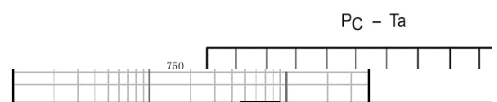
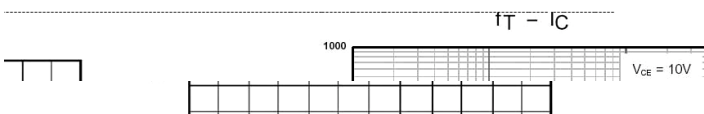
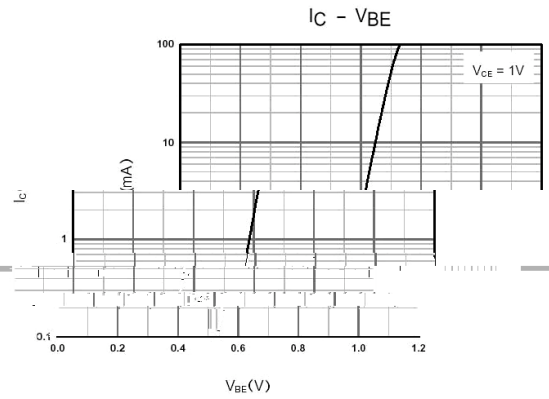
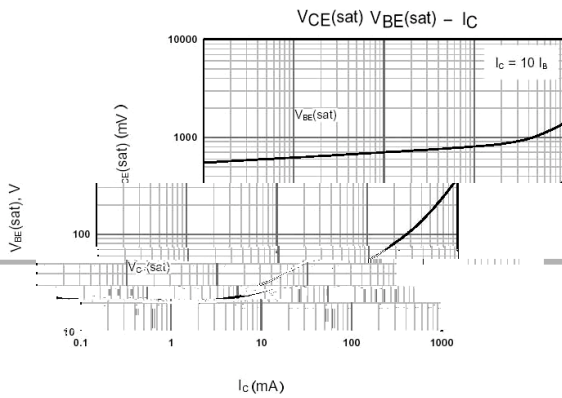
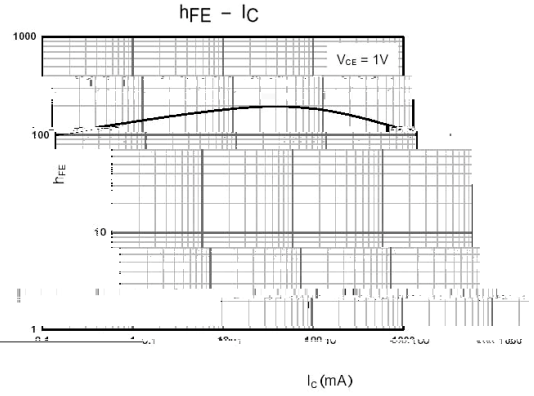
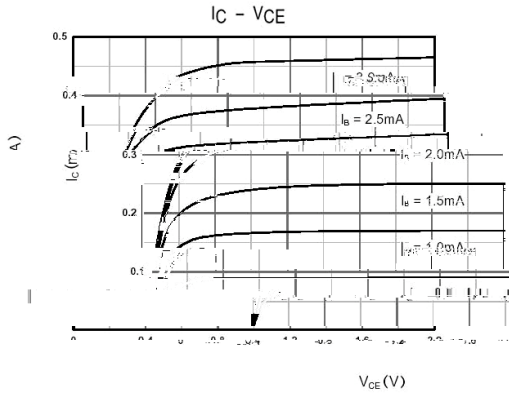
## / Absolute Maximum Ratings(Ta=25 )

Parameter	Symbol	Rating	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 - Continuous	$I_C$	-800	mA
Base Current - Continuous	$I_B$	-200	mA
Collector Power Dissipation	$P_C$	625	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55~150	

## / Electrical Characteristics(Ta=25 )

Parameter	Symbol	Test Conditions	Min	Typ	Max	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	A
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-6.0V$ $I_C=0$			-0.1	A
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 to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$		-0.28	-0.6	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-500mA$ $I_B=-50mA$		-0.98	-1.2	V
Base to 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	$C_{ob}$	$V_{CB}=-10V$ $f=1.0MHz$ $I_E=0$		15		pF

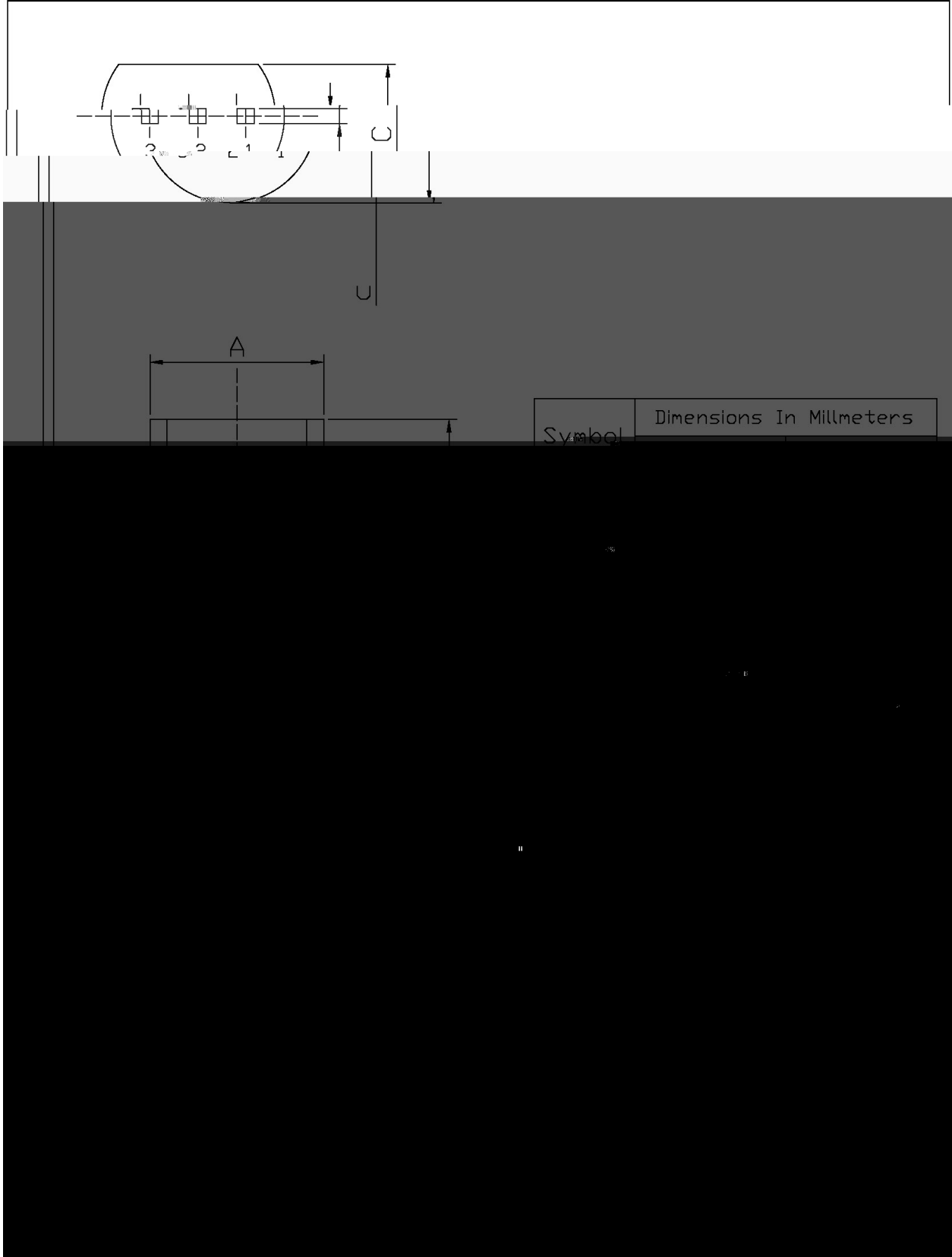
**/ Electrical Characteristic Curve**



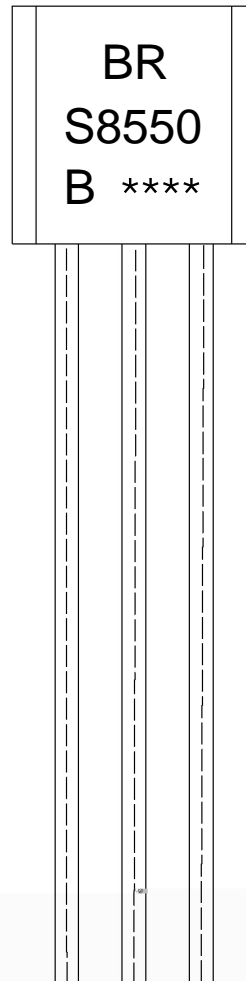
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



$h_{FE}$

Note:

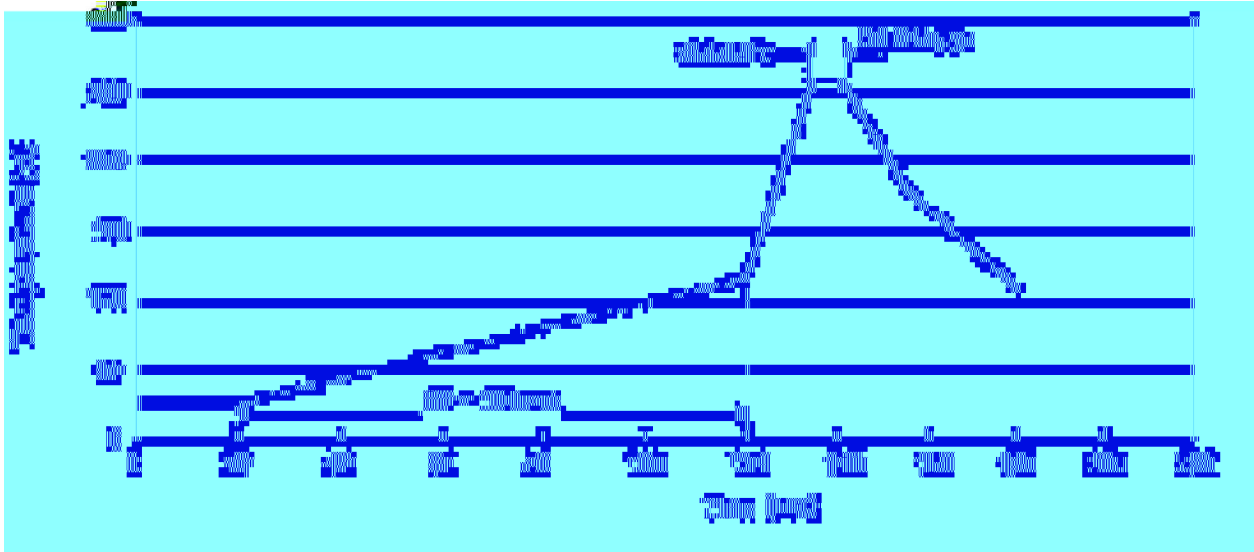
BR: Company Code.

S8550: Product Type.

B:  $h_{FE}$  Classifications Symbol.

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

( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- |   |     |     |    |          |   |
|---|-----|-----|----|----------|---|
| 1 | 25  | 150 | 60 | 90sec;   | 1.Preheating:25~150 , Time:60~90sec.    |
| 2 | 255 | 5   | 5  | 0.5sec;  | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 |     |     | 2  | 10 /sec. | 3. Cooling Speed: 2~10 /sec.            |

/ Resistance to Soldering Heat Test Conditions

270 5                      10 1 sec.                      Temp.:270±5                      Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120	10	30,000	328×230×42	小箱 480×346×235, 大箱 547×407×268

/ Notices