

/ Descriptions

SOT-89 PNP Silicon PNP transistor in a SOT-89 Plastic Package.

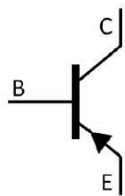
/ Features

8050T
Complementary pair with 8050T, HF Product.

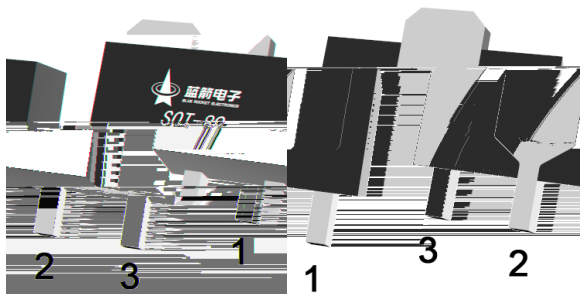
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ Marking

h _{FE} Classifications Symbol	B	C	D
h _{FE} Range	85 160	120 200	160 300
Marking	HY2B *	HY2C *	HY2D *

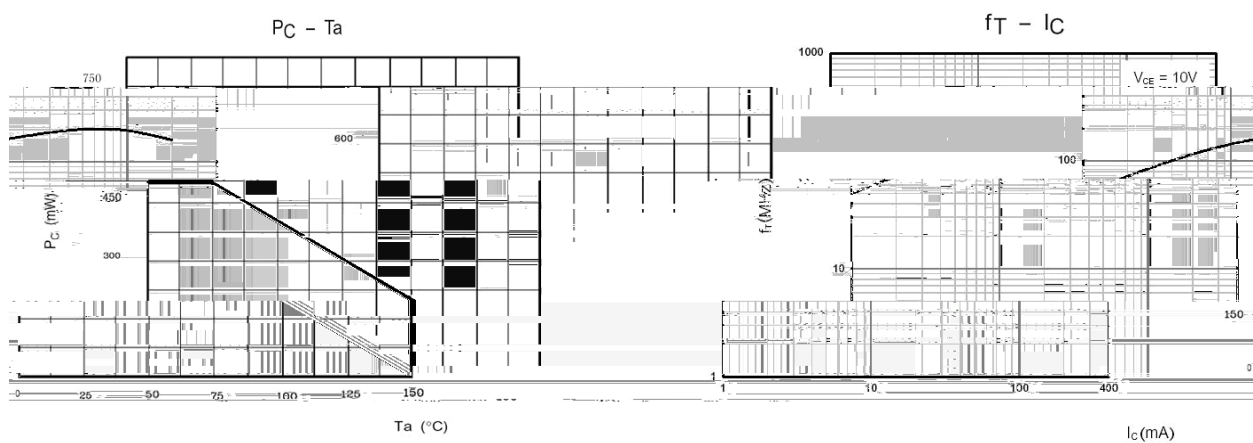
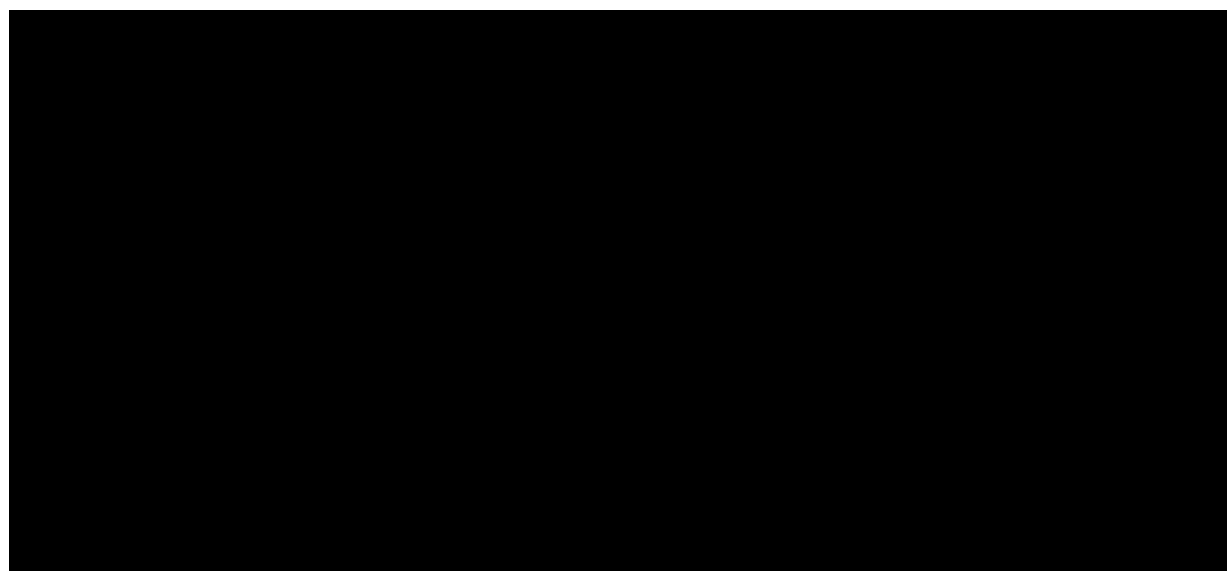
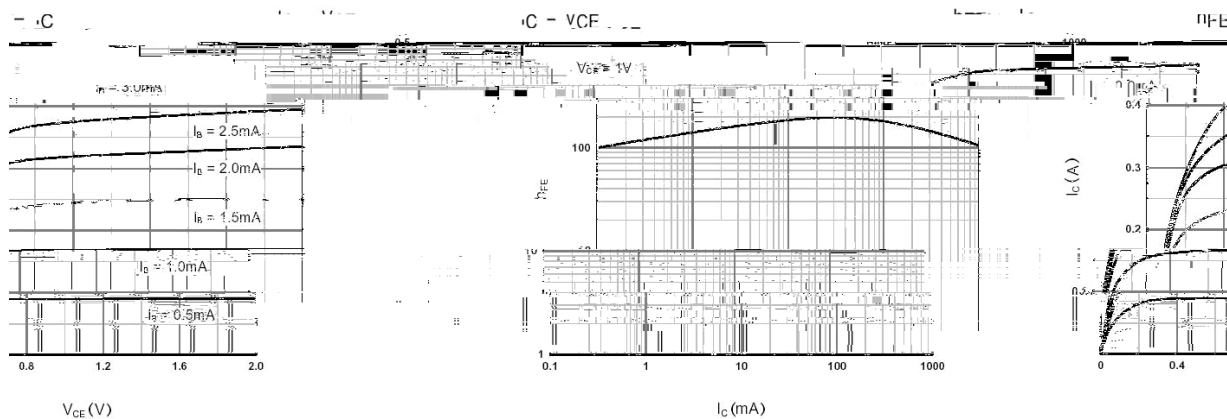
/ Absolute Maximum Ratings(Ta=25)

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	-1.5	A
Collector Base - Continuous	I_B	-0.5	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

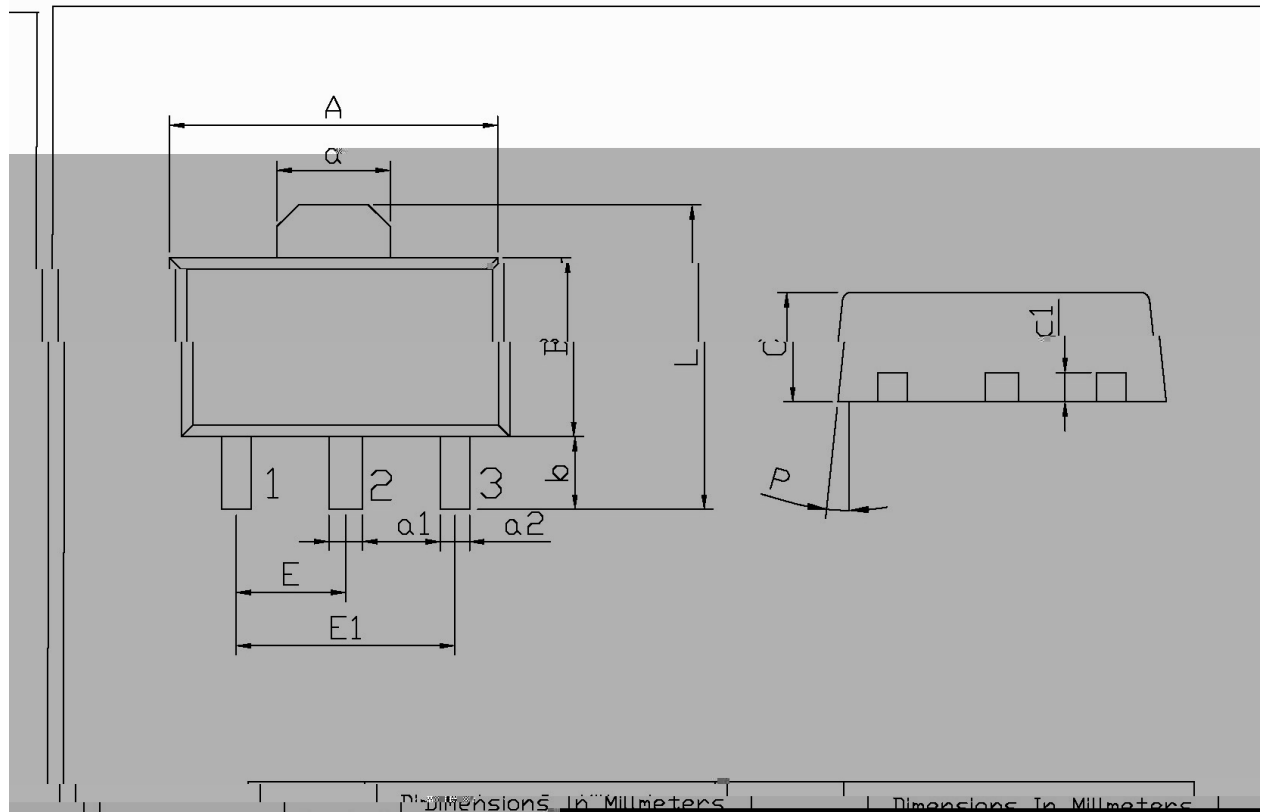
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-0.1mA$ $I_E=0$	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-2.0mA$ $I_B=0$	-25			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-0.1mA$ $I_C=0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-35V$ $I_E=0$			-0.1	μA
Emitter Base 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	
	$h_{FE(2)}$	$V_{CE}=-1.0V$ $I_C=-800mA$	40			
	$h_{FE(3)}$	$V_{CE}=-1.0V$ $I_C=-5.0mA$	45			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-800mA$ $I_B=-80mA$		-0.28	-0.5	V
Emitter to Base Saturation Voltage	$V_{BE(sat)}$	$I_C=-800mA$ $I_B=-80mA$		-0.98	-1.2	V
Emitter to Base 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

/ Electrical Characteristic Curve

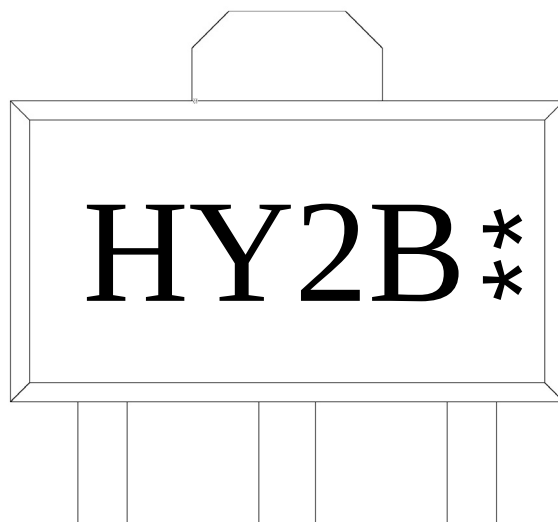


/ Package Dimensions

單位: mm



/ Marking Instructions



H

Y2

B h_{FE}

**

Note:

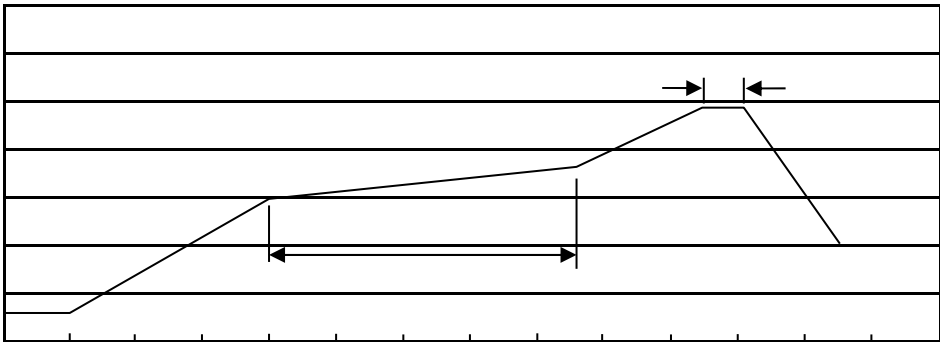
H: Company Code

Y2: Product Type

B h_{FE} Classifications Symbol

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

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	6	42,000	7 ×12	180×120×180	390×385×205

/ Notices