

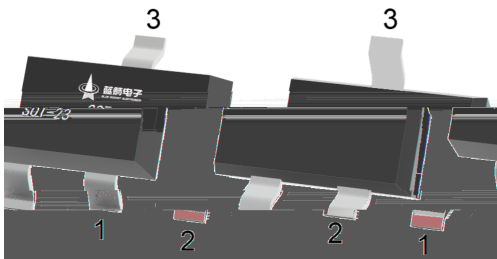
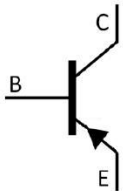
Rev.J Jun.-2025

SOT-23          PNP          Silicon PNP transistor in a SOT-23 Plastic Package.

S8050M

Complementary pair with S8050M,HF product.

Power amplifier applications.

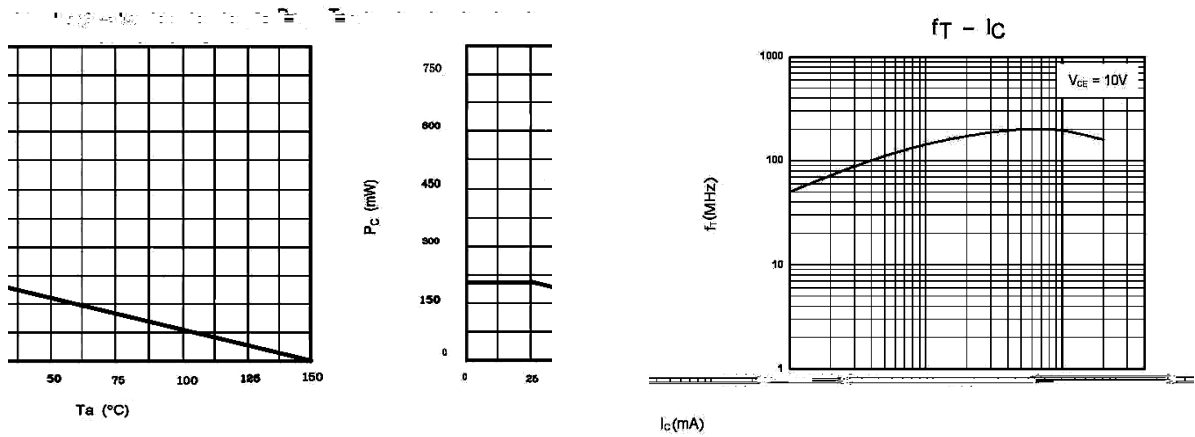
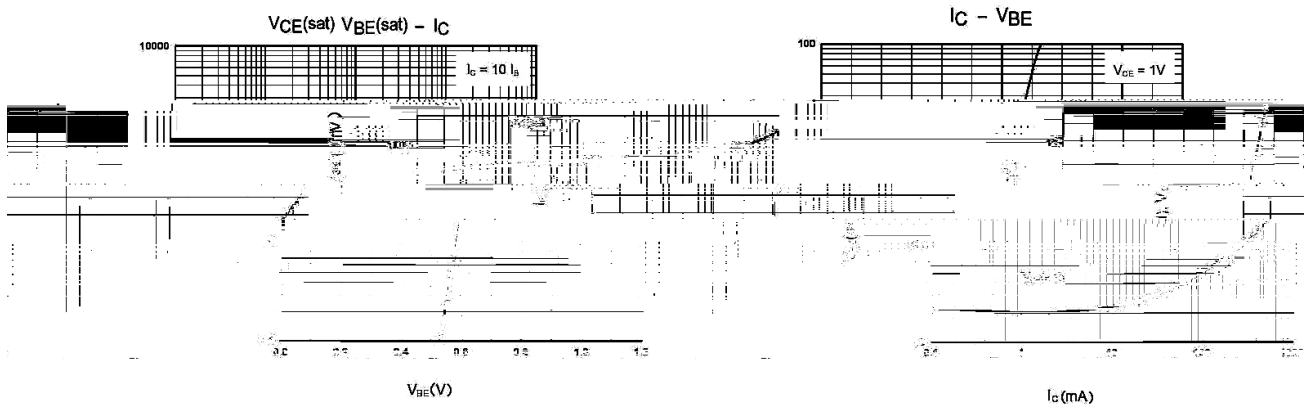
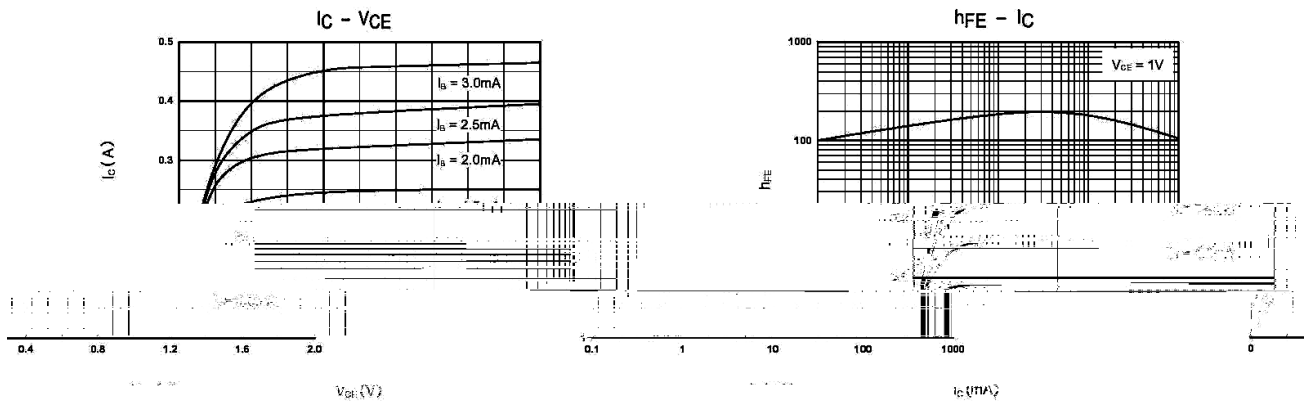


PIN1 Base          PIN 2 Emitter          PIN 3 Collector

h <sub>FE</sub> Classifications Symbol	B	C	D
h <sub>FE</sub> Range	85 160	120 200	160 300
Marking	HY4B	HY4C	HY4D

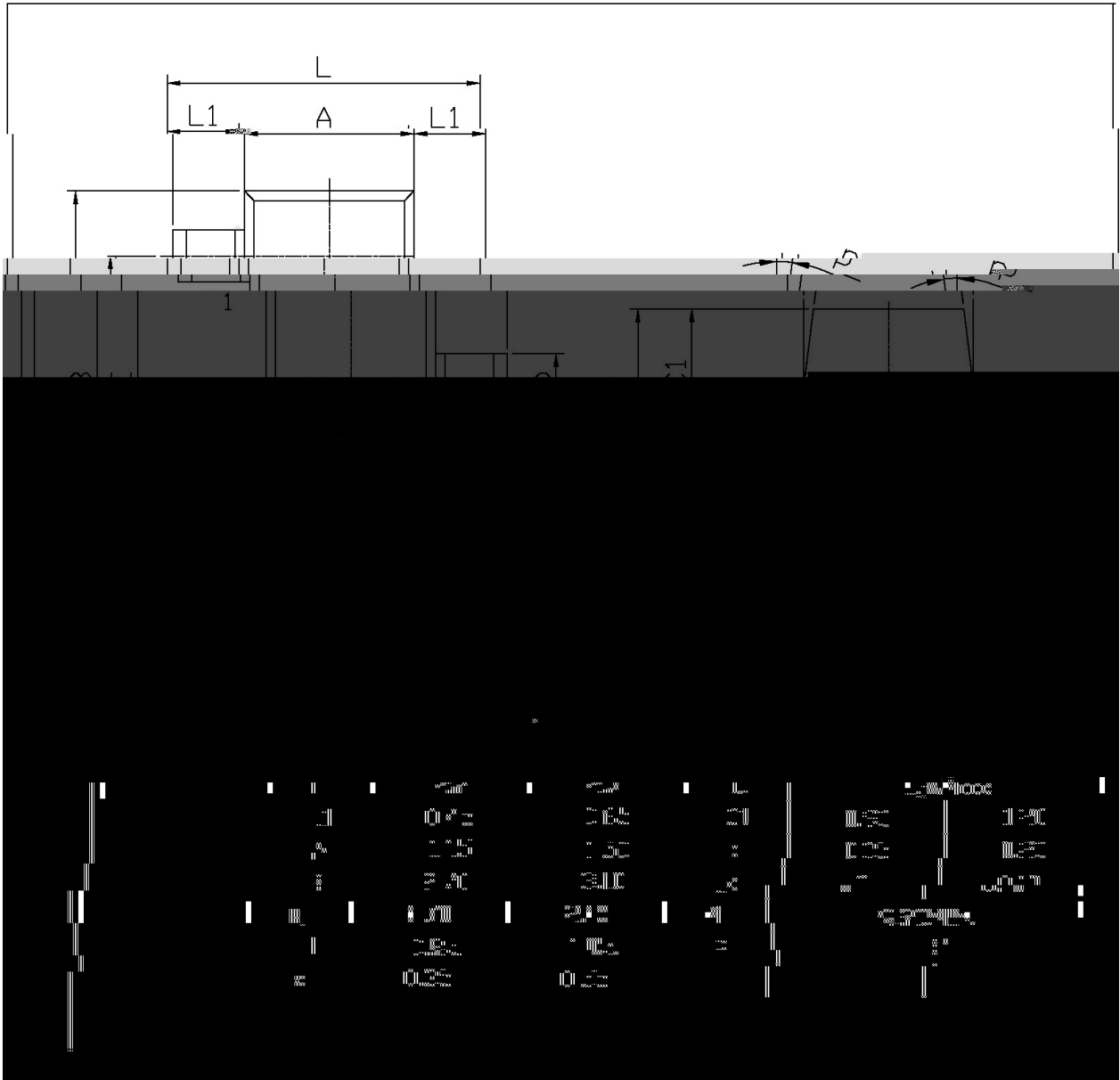
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-40	V
Collector to Emitter Voltage	$V_{CEO}$	-25	V
Emitter to Base Voltage	$V_{EBO}$	-6.0	V
Collector Current	$I_C$	-800	mA
Base Current	$I_B$	-200	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_j$	150	
Storage Temperature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

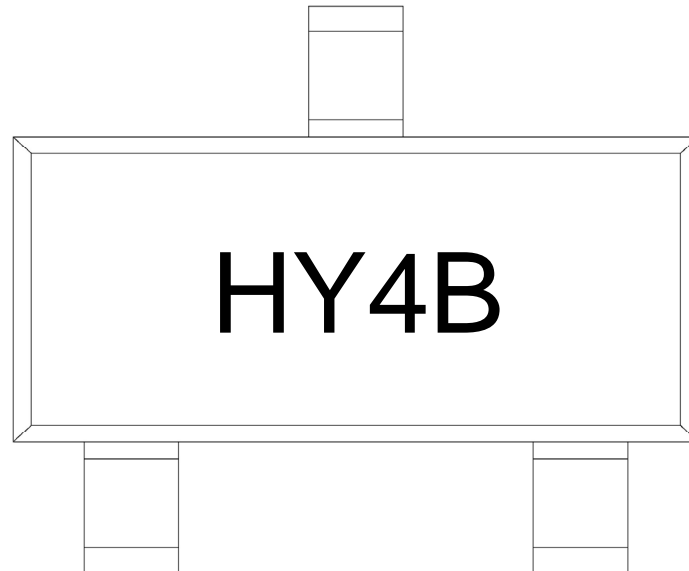
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=-0.1mA$ $I_E=0$	-40			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=-2.0mA$ $I_B=0$	-25			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=-0.1mA$ $I_C=0$	-6.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-35V$ $I_E=0$			-0.1	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-6.0V$ $I_C=0$			-0.1	$\mu A$
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-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



SOT-23

单位: mm





H

Y4

B             $h_{FE}$

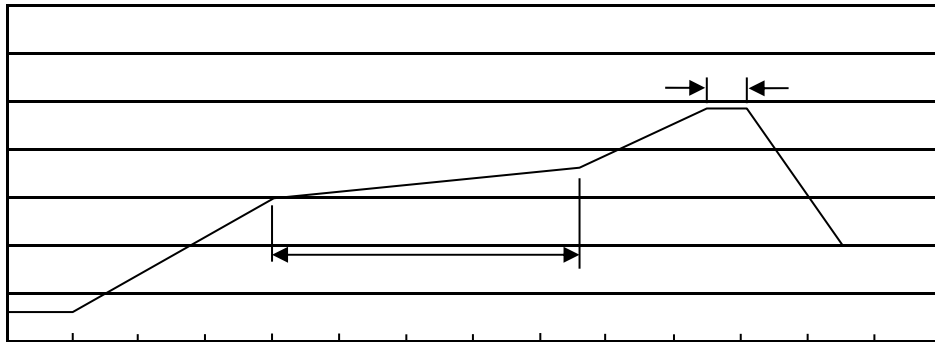
Note:

H            Company Code

Y4          Product Type Code

B             $h_{FE}$  Classifications Symbol Code

### 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.            |

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7 x8	180x120x180	390x385x205