

/ Descriptions

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

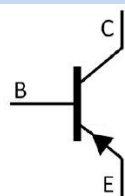
/ Features

8050MG
Complementary pair with 8050MG, HF Product.

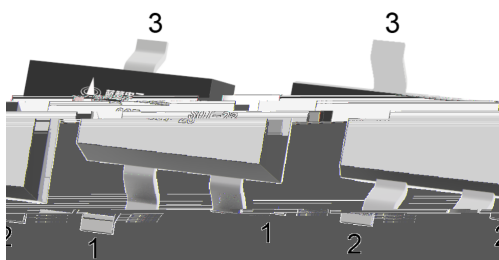
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

/ hFE Classifications & Marking

hFE Classifications Symbol	B	C	D
hFE Range	85 160	120 200	160 300
Marking	GY2B	GY2C	GY2D

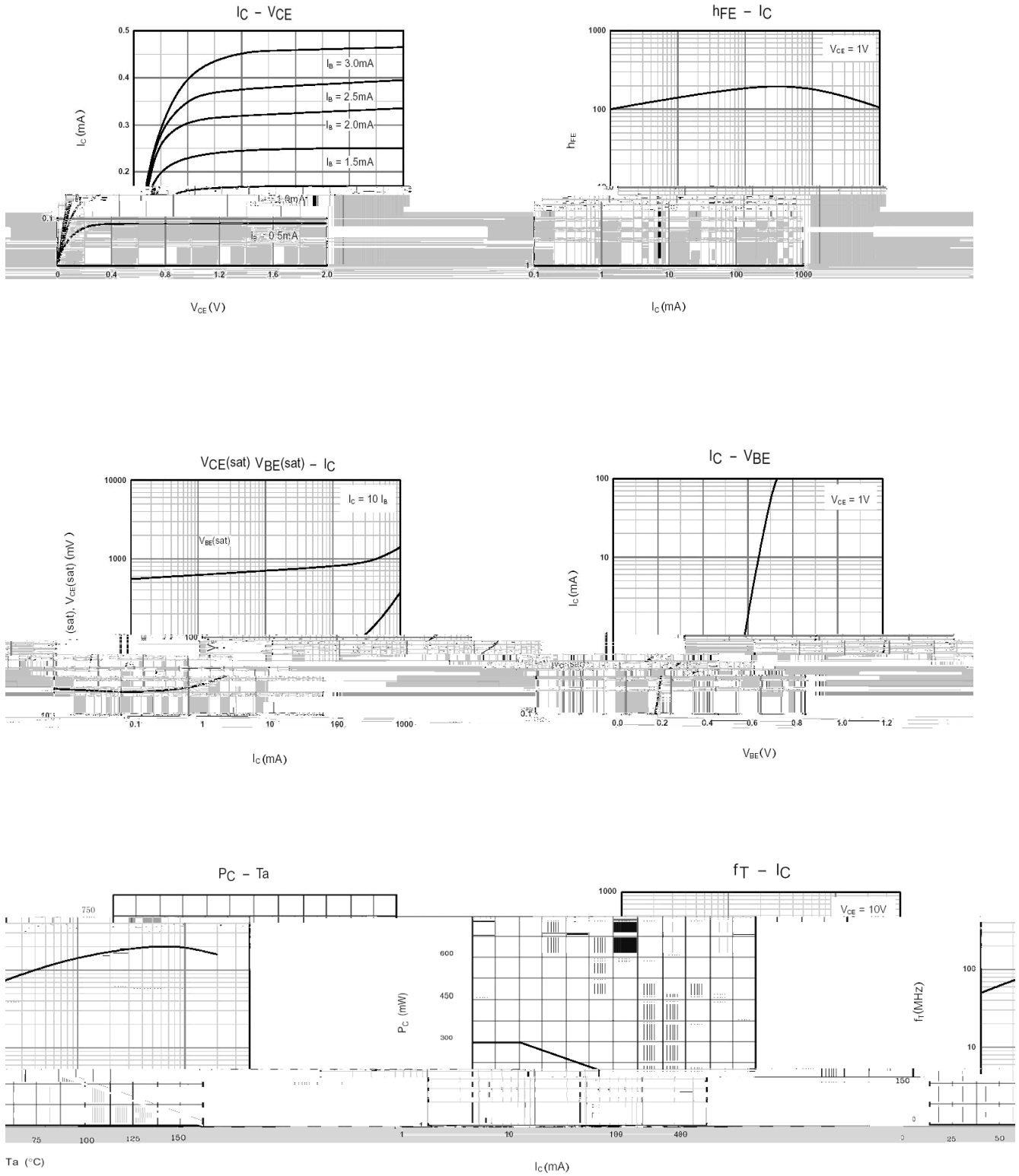
/ Absolute Maximum Ratings(Ta=25)

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	I _C	-1.5	A
Base Current	I _B	-0.5	A
Collector Power Dissipation	P _C	300	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 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-Emitter Saturation Voltage	V _{CE(sat)}	I _C =-800mA I _B =-80mA		-0.28	-0.5	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =-800mA I _B =-80mA		-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

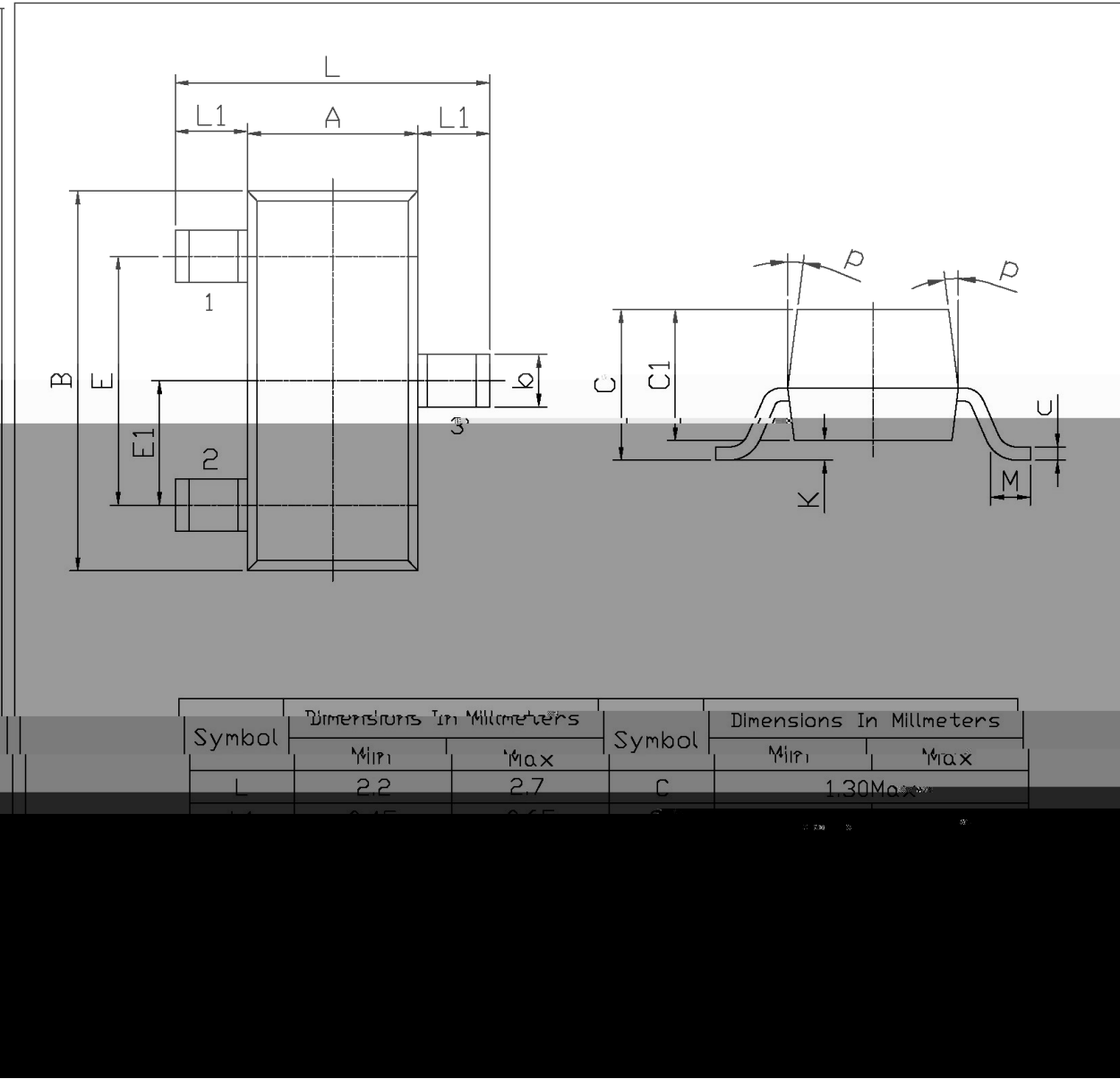
/ Electrical Characteristic Curve



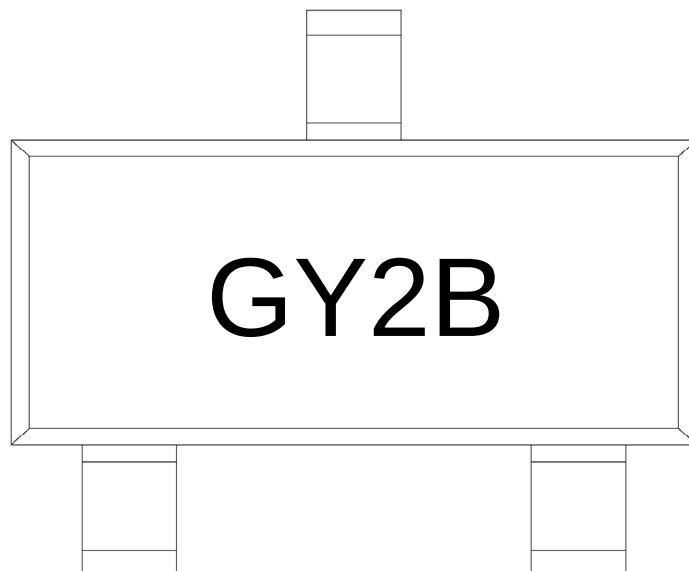
/ Package Dimensions

SOT-23

单位：mm



/ Marking Instructions



G

Y2

B

h_{FE}

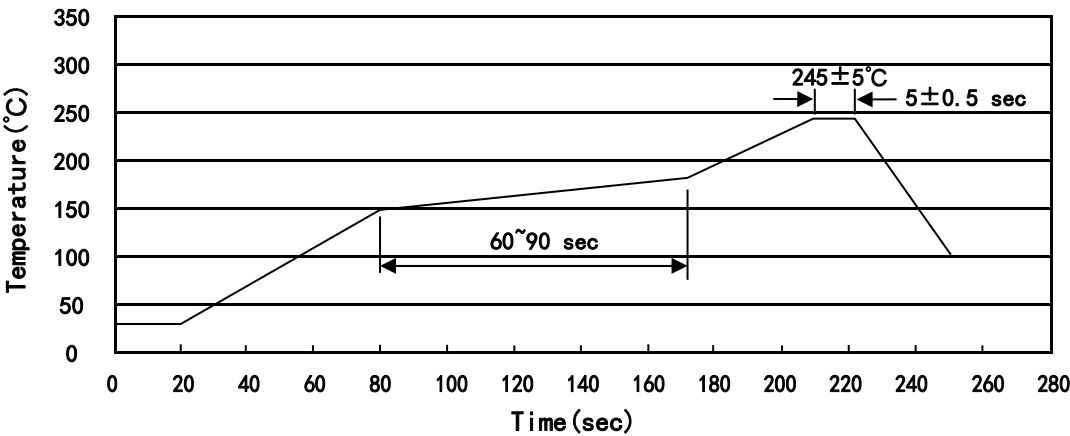
Note:

G Halogen Free Product Code

Y2 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.

/ 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-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices