8050M

Rev.C Mar.-2023

/ Descriptions

SOT023 ṂṂĿ NPN ӕṀү s Ⅱ ٦ Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

љ 8550M Й̧ ´ ι ὴ̩ ғ ᵝ

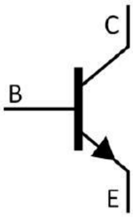
Complementary pair with 8550M,HF Product.

/ Applications

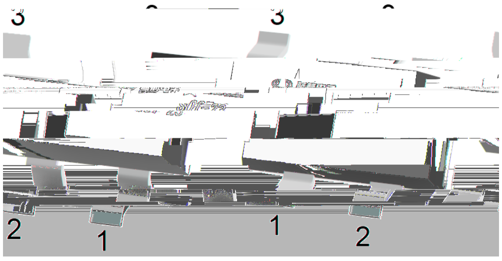
[illegible]

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

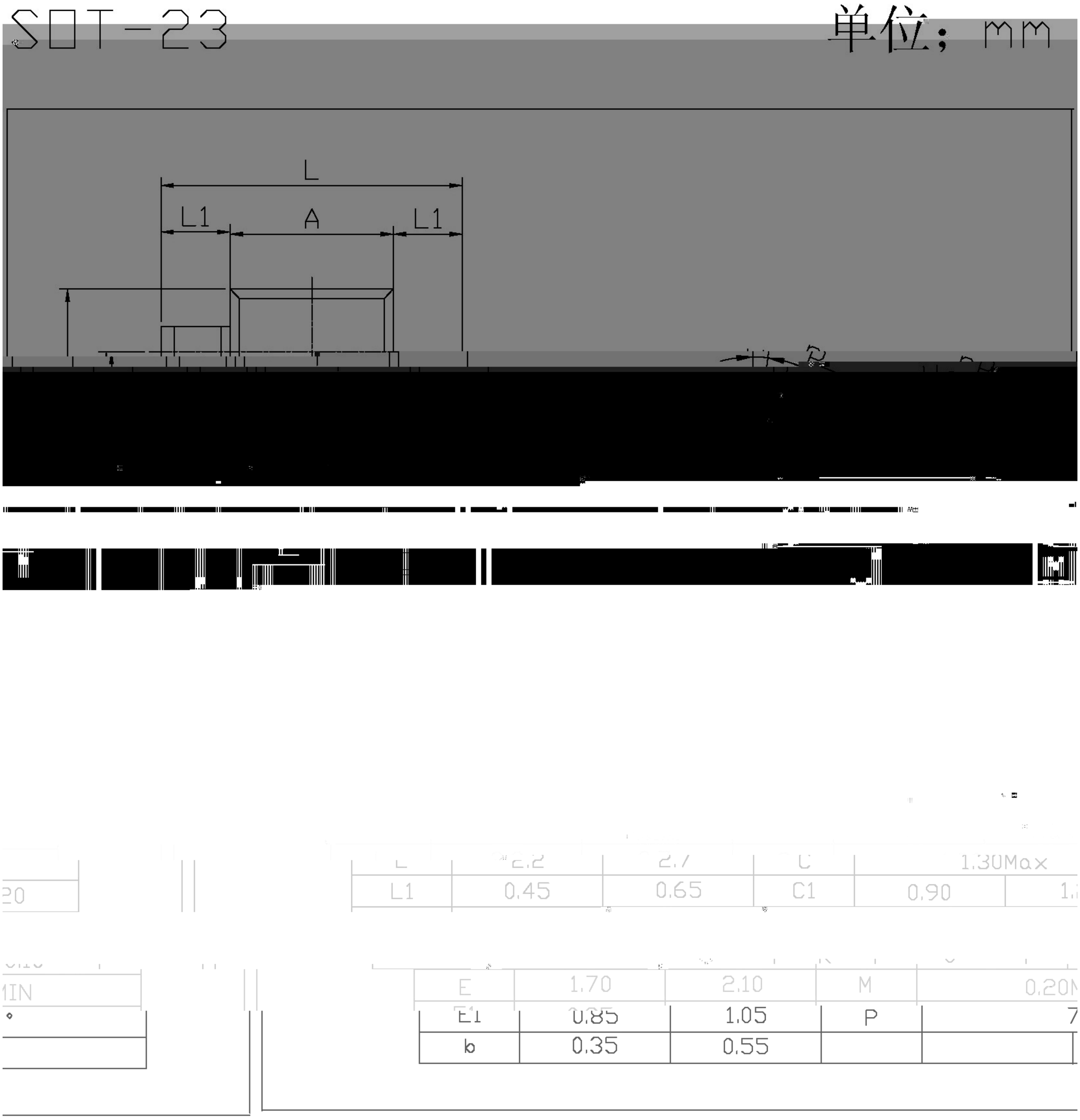
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	85~160	120~200	160~300
Marking	HY1B	HY1C	HY1D

v ̈Ω Parameter	˧ Symbol	̈ΩӪ Rating	ᴅ ɉ Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current - Continuous	I_C	1.5	A
Base Current	I_B	0.5	A
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	ɫ
Storage Temperature Range	T_{stg}	-55 Ḱ 150	ɫ

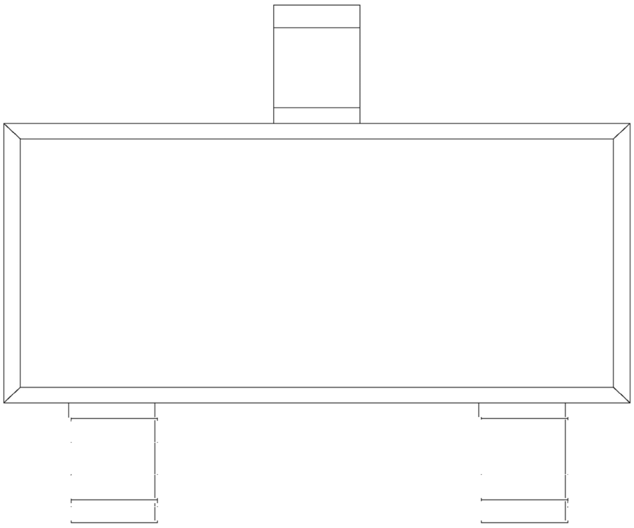
v ̈Ω Parameter	˧ Symbol	╜ ؛ᛏ ʈ Test Conditions	ῳ ṇ Ӫ Min	Ɛ ʒ Ӫ Typ	ῳ ̚ Ӫ Max	ᴅ ɉ Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=0.1mA I_E=0	40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=2.0mA I_B=0	25			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_C=0.1mA I_C=0	C B O			

/ Package Dimensions



L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.
E	1.70	2.10	M	0.20M	
E1	0.85	1.05	P	7	
b	0.35	0.55			

/ Marking Instructions



ب ˝ χ

H χ ㅉ ʒ Ⴖ

Y1 χ ㅉ ʒ Ⴖ

C χ ㅉ k_{FE} ˂ ╘

ho14[7de14[7n)5(s)TjT0016 89.00011Y5.70.0 Prod)22y

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

ب ˝ χ
1 ȴ ♬ □ ẙ 150 Ḱ 180 ł ı `H ڗ 60 Ḱ 90sec;
2 Ś Ѳ □ ẙ 245 ° 5 ł ı `H ڗ `Y ለ ㅈ 5 ° 0.5sec;
3 ì ˙ ㇸ ˛ ɔ ഛ ẙ ㅈ 2 Ḱ 10 ł /sec.

Note:
1.Preheating:150~180 ł , Time:60~90sec.
2.Peak Temp.:245 ° 5 ł , Duration:5 ° 0.5sec.
3. Cooling Speed: 2~10 ł /sec.

/ Resistance to Soldering Heat Test Conditions

□ ẙ χ 260 ° 5 ł `H ڗ χ 10 ° 1 sec.

Temp.:260 ° 5 ł Time:10 ° 1 sec

/ Packaging SPEC.

ი` γ ٤ / 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		