/ Descriptions

SOT023 ĻĻĖ NPN ÆĠĻ s ǁ ˥ Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

ћ 8550M ЙĮ ´ ı ĵ ƒ β

Complementary pair with 8550M,HF Product.

/ Applications

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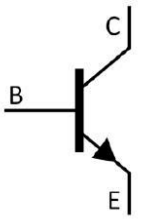
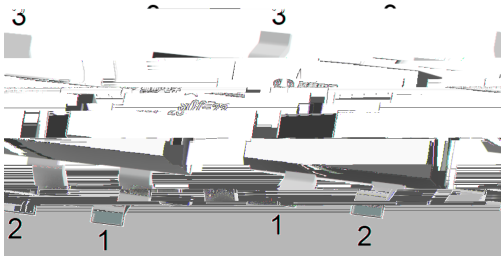
Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

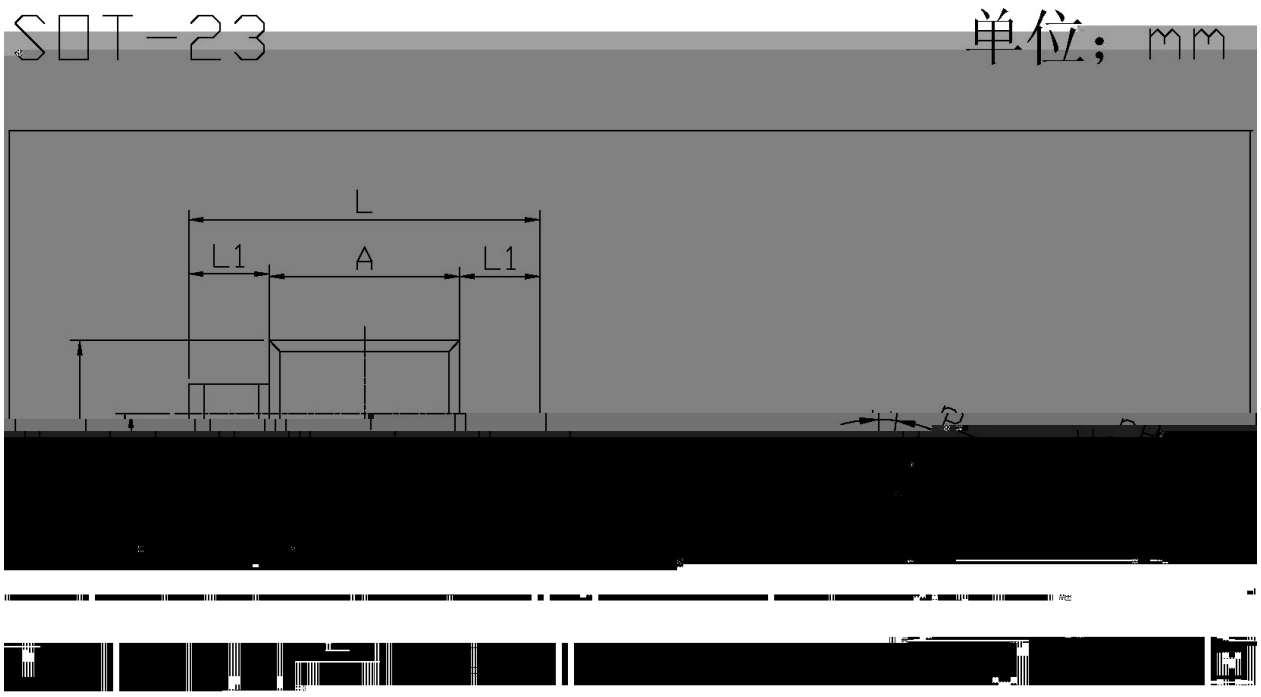
/ h_{FE} Classifications & Marking

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

v ̈Ω Parameter	ϒ Symbol	̈Ω Ö Rating	D Ч 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	ł
Storage Temperature Range	T_{stg}	-55 Ќ 150	ł

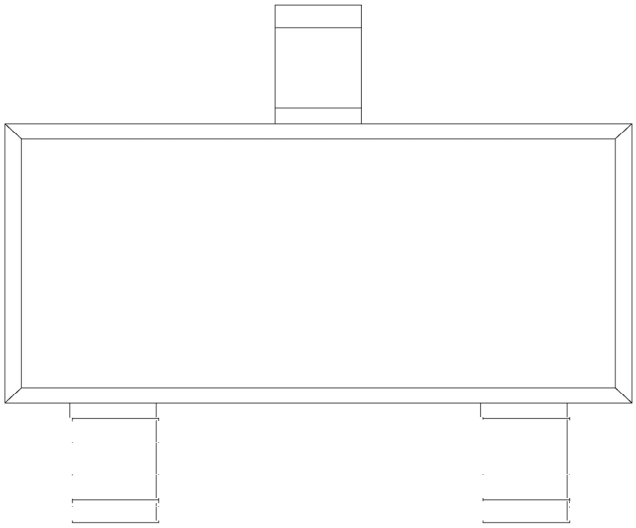
v ̈Ω Parameter	ϒ Symbol	Ш :ϯ ϒ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ᶻ Ö Max	D Ч Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=0.1mA I_E=0	40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=2.0mA I_B=0	25			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_C=0.1mA I_C=0	C B O			

/ 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	0.20N	
E1	0.85	1.05	P	7	
b	0.35	0.55			

/ Marking Instructions



ب ˝ χ

H χ ₦ ३ Γ

Y1 χ ₦ ३ Γ

C χ ₦ k_{FE} ‘ Ł

ho14[de14[n)5(s)TjT7016 89.0001Y5.710.0 Prod)22y

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

ب ˝ χ

1 Ĺ ♬ □ ỷ 150 Ḱ 180 ł ı `H ژ 60 Ḱ 90sec;

2 Š Ө □ ỷ 245 ° 5 ł ı `H ژ `Y ㅅ ㎛ 5 ° 0.5sec;

3 ì ˙ ㅓ ˛ ɔ ෯ ỷ ㎛ 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

□ ỷ χ 260 ° 5 ł `H ژ χ 10 ° 1 sec. Temp.:260 ° 5 ł Time:10 ° 1 sec

/ Packaging SPEC.

ɔ ` ㅛ Ł / REEL

Package Type	Units					Dimension		(unit mm³)
	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		