"Yت / Descriptions

VRW0;< ṂṂ Ŀ QSQ ÆṀ ч s ‖ ㄱ Silicon NPN transistor in a SOT-89 Plastic Package.

◕ È / Features

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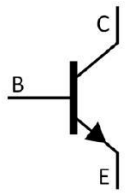
Low $V_{CE(sat)}$,high performance.

४ ڍ / Applications

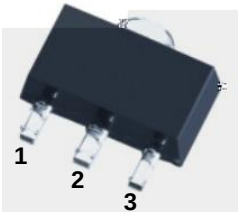
ᾗ ـ إ ڑ ѽ ᵶ

Audio frequency output amplifier.

Л ف ᷊ ᷊ ≠ ع / Equivalent Circuit



ã ﾒ ὐ᷊ / Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

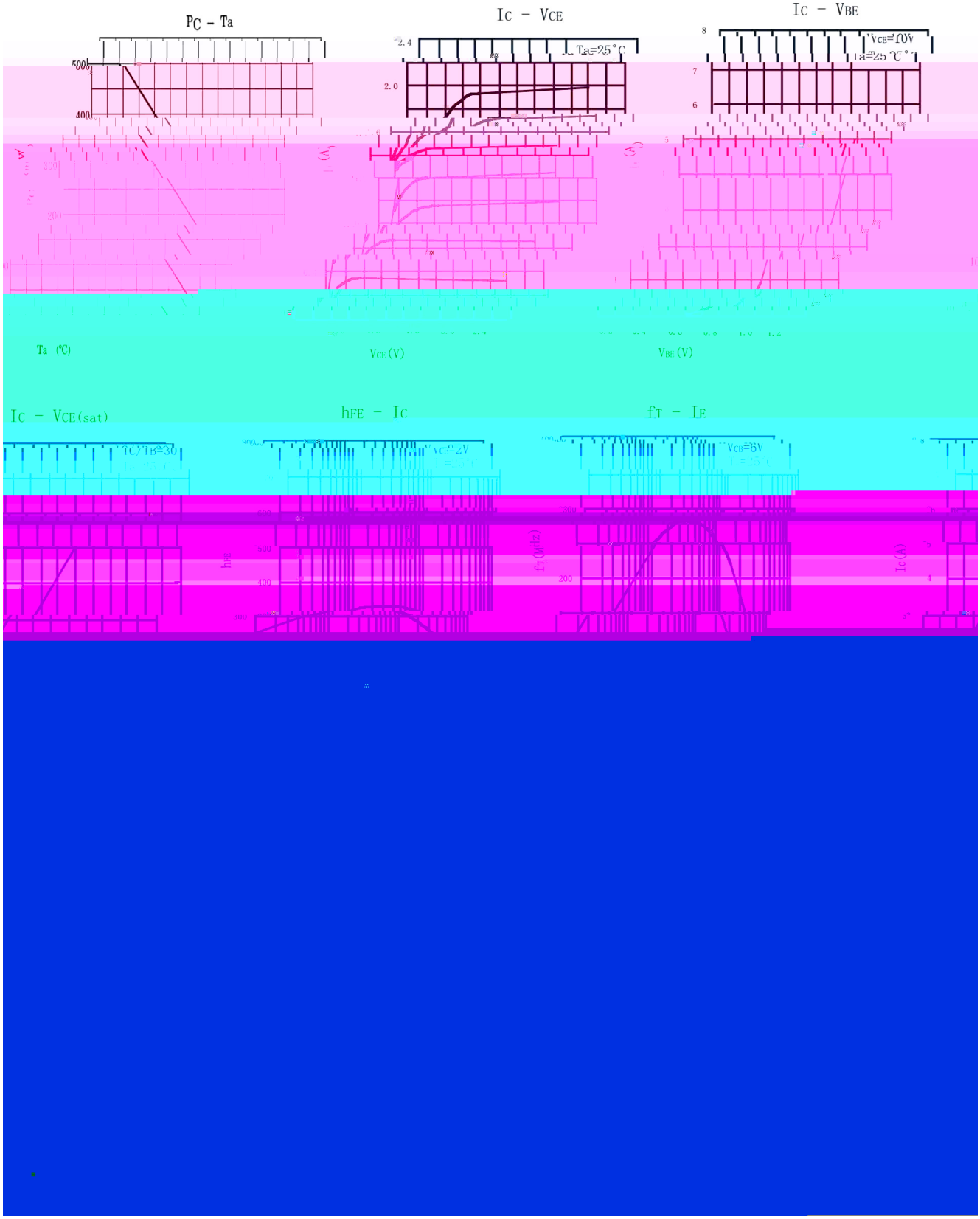
ŧ. ʜ ڸ / Marking

h_{FE} Classifications Symbol	P	Q	R	S
h_{FE} Range	180 270	230 380	340 600	560 1000
Marking	H65P	H65Q	H65R	H65S

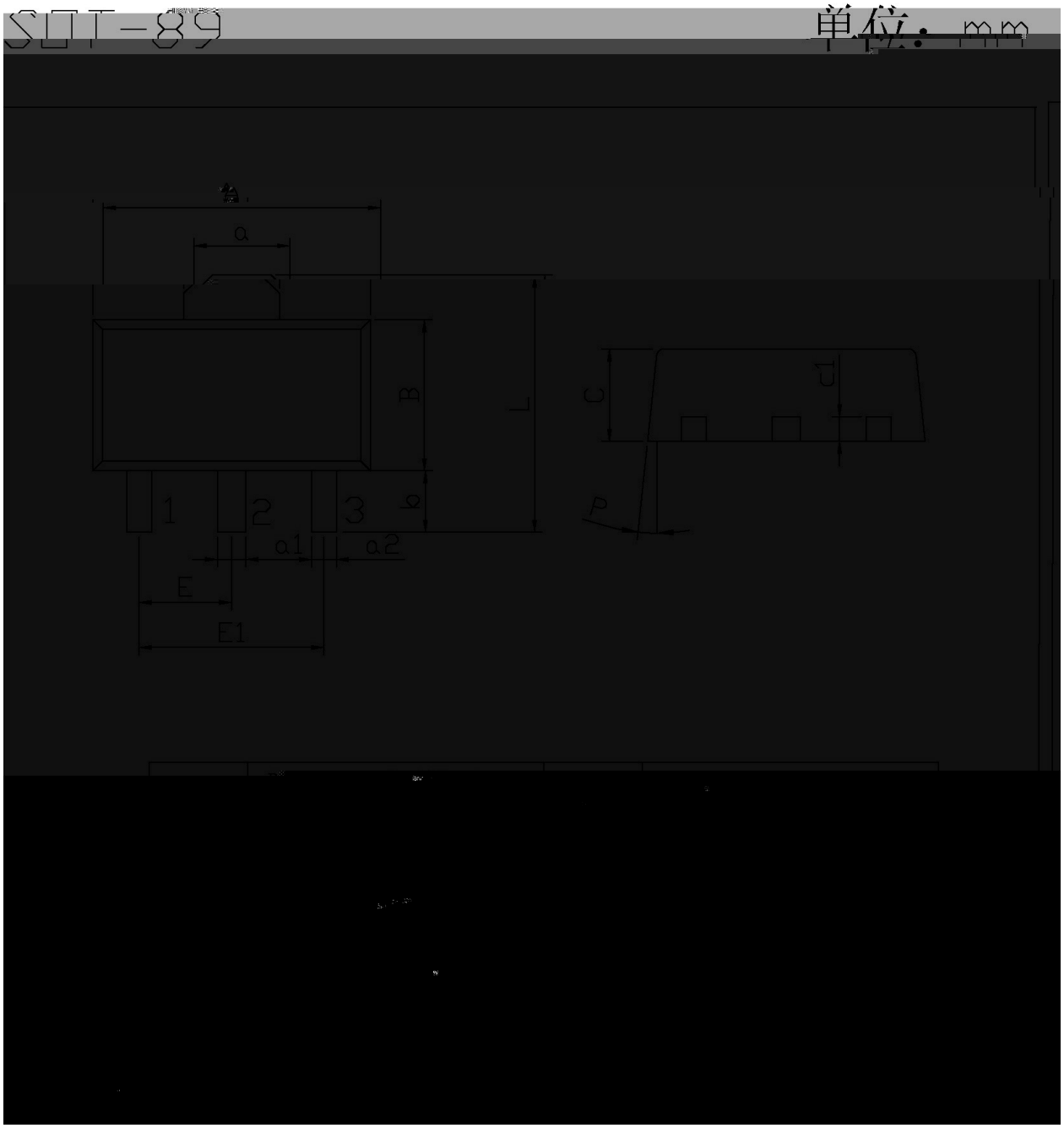
v ˝Ω Parameter	ϒ N Symbol	˝Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current-Continuous	I_C	5.0	A
Collector Current -Continuous(Pluse)	I_{CP}	8.0	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

v ˝Ω Parameter	ϒ N Symbol	Ш :ˆ Ţ Test Conditions	ώ ņ Ö Min	Ɛ ʒ Ö Typ	ώ ² Ö Max	D Ч Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	20			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=10 A I_C=0	7.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=10V I_E=0			0.1	A

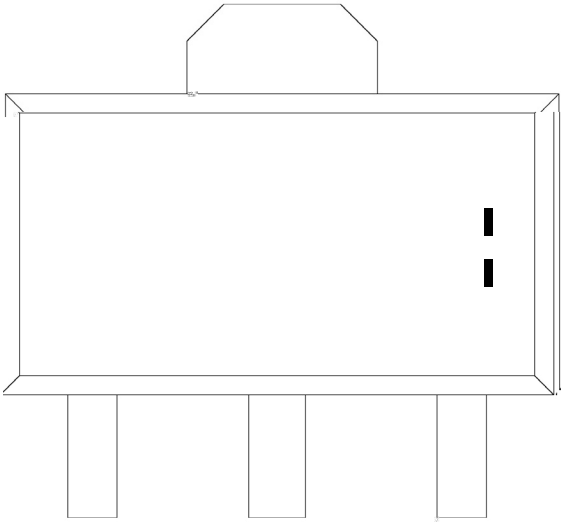
≠ ∃ ̃Ạ´E ∨ ∫ / Electrical Characteristic Curve



ᵘ ĖÒĻ ʃ / Package Dimensions



ł. Ļ Ω / Marking Instructions



ت ˝ χ

H χ ѭ ҳ и Ґ

65 χ ѭ ҙ N Ґ

P χ ѭ h_{FE} ‘ 6 Ґ

-- χ ѭ ı ғ ń N Ґ ı ₺ ı ғ ń N Ψ ק

Note:

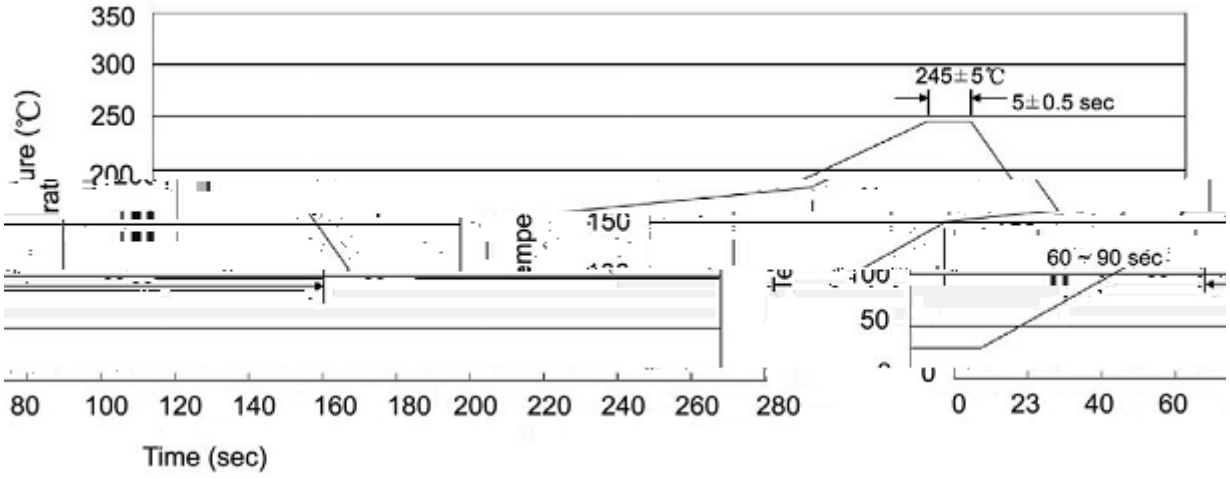
H: Company Code.

65: Product Type.

P χ h_{FE} Classifications Symbol

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

ѭ ʃ ╕ ẘ ´E ⅵ ƒ (ѽ ƨ) / Wh p shudwxuh Suriloh iru LU Uhior z Vroghulq j+Se0luhh,



ب ˝ χ

1 Ĺ ♬ □ ẙ 25 Ḱ 150 ɬ ı ˋH ڑ 60 Ḱ 90sec;

2 Š Ë □ ẙ 245 ° 5 ɬ ı ˋH ڑ ˋY ⅄ ѭ 5 ° 0.5sec;

3 ì ˙ ⅵ ˛ ɔ ѡ ẙ ѭ 2 Ḱ 10 ɬ /sec.

Note:

1.Preheating:25~150 ɬ , Time:60~90sec.

2.Peak Temp.:245 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

⅄ ŭ ɋ ˉ ˋY Ţ / Resistance to Soldering Heat Test Conditions

□ ẙ χ 260 ° 5 ɬ ˋH ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

ɒ Ŀ ≮ — / Packaging SPEC.

ɔ ` ɣ Ŀ / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-89	1,000	7	7,000	8	56,000	7 ×12	180×120×180	385×257×392