"Yت / Descriptions

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

◕ È / Features

Ҥ ɔ я ı ᶻ ɔ ╚/ ˡ лъ EF;9< Ѝ ´

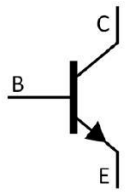
Low voltage, high current, Complementary to BC869.

ᵛ ᵩ / Applications

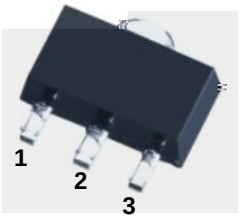
˘ ᵻ ∪ Â ʜ ⊐ ѽ ᶻ/ ˍ ᶣ ᵱ ㄱ

General purpose switching and amplification, such as audio output stages.

Лف ᷇ ᷊ ≠ ɛ / Equivalent Circuit



ẵ ɻ ŭ˜ / Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

ł. ʜ ↄ̈ / Marking

Marking	HCAC‡

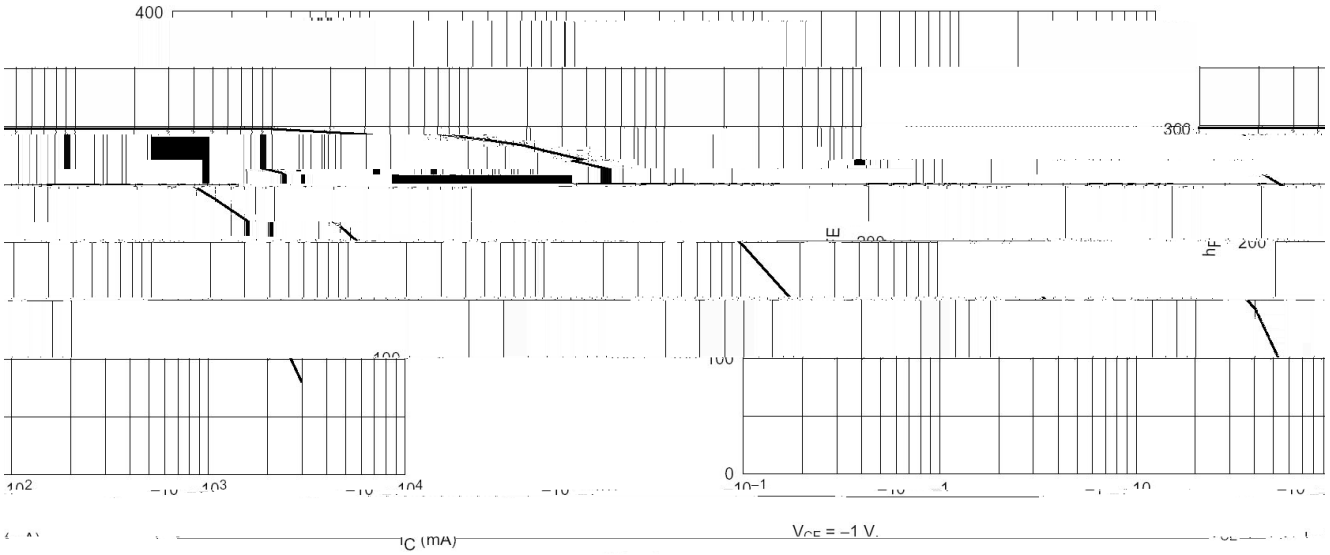
ώ ₴ Ξ Ѫ / Absolute Maximum Ratings(Ta=25 ɹ)

v ΅Ω Parameter	ϒ N Symbol	΅Ω Ö Rating	D Ɥ Unit
Collector to Base Voltage	V_{CBO}	32	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current-Continuous	I_C	1.0	A
Peak Collector Current	I_{CM}	2.0	A
Peak Base Current	I_{BM}	200	mA
Collector Power Dissipation	P_C	1.35	W
Junction Temperature	T_j	150	ł
Storage Temperature Range	T_{stg}	-55 Ќ 150	ł

≠ ∧ Ξ Ѫ / Electrical Characteristics(Ta=25 ɹ)

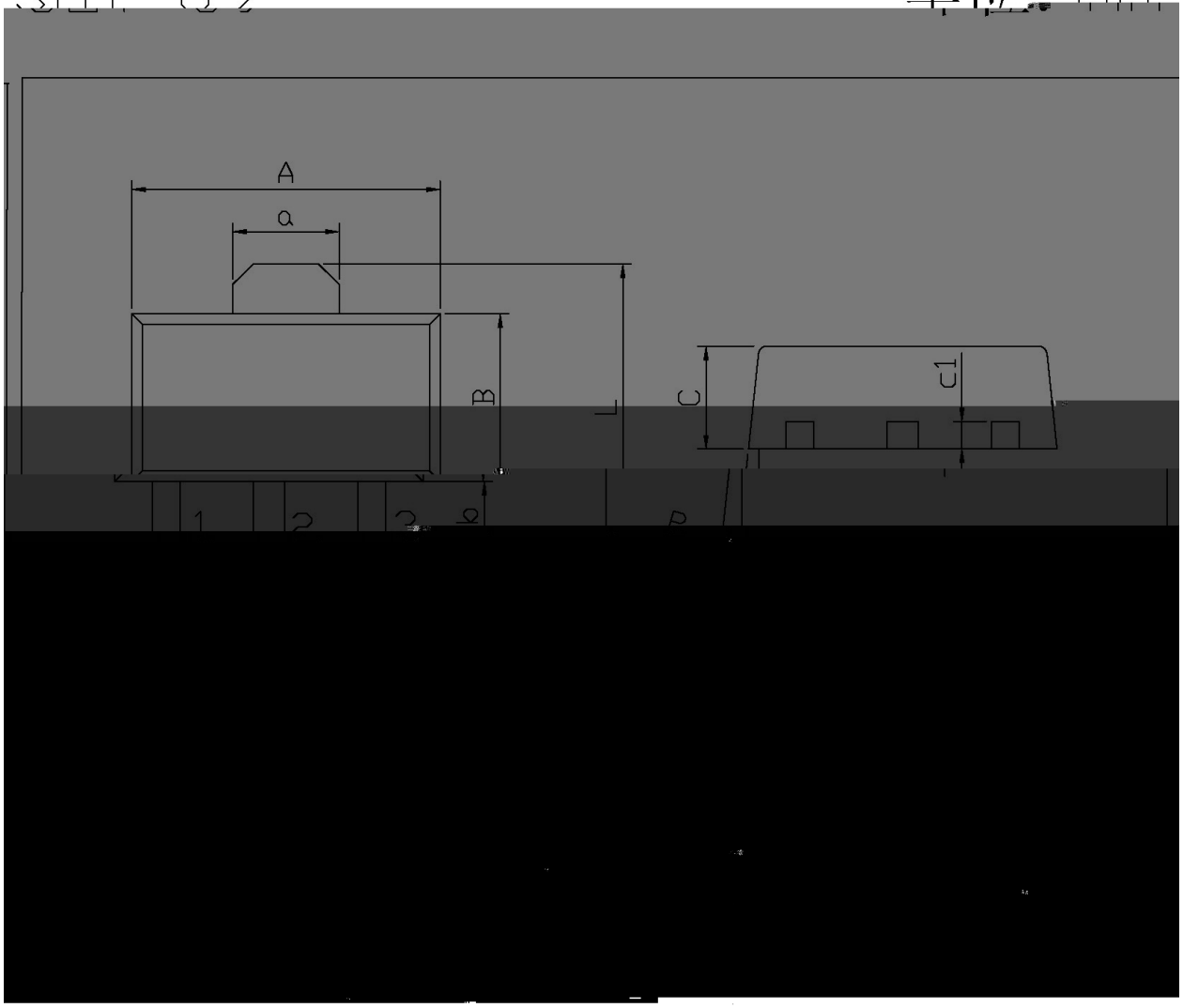
v ΅Ω Parameter	ϒ N Symbol	⅄ :ϯ ϒ Test Conditions	ώ ņ Ö Min	Ɛ ʒ Ö Typ	ώ ≠ Ö Max	D Ɥ Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=25V I_E=0			0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=1.0V I_C=500mA	85		375	
	$h_{FE(2)}$	V_{CE}=10V I_C=5.0mA	50			
	$h_{FE(3)}$	V_{CE}=1.0V I_C=1.0A	60			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=1.0A I_B=100mA			500	mV
Base to Emitter Voltage	$V_{BE(1)}$	V_{CE}=10V I_C=5.0mA		620		mV
	$V_{BE(2)}$	V_{CE}=1.0V I_C=1.0A			1.0	V
Transition Frequency	f_T	V_{CE}=5.0V I_C=10mA f=100MH_Z	40			MHz

≠ ∃ ⁷Ą´E ∀ ƒ / Electrical Characteristic Curve

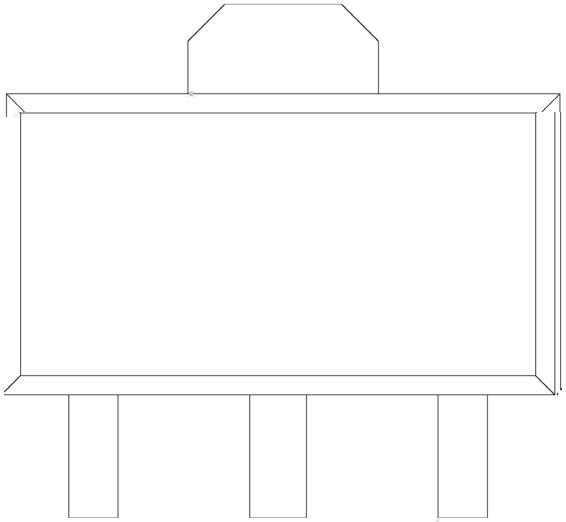


ᵘ ĖÒĻ ʃ / Package Dimensions

SOT-89 单位：mm



ł. Ļ Ω / Marking Instructions



ب ˝ χ

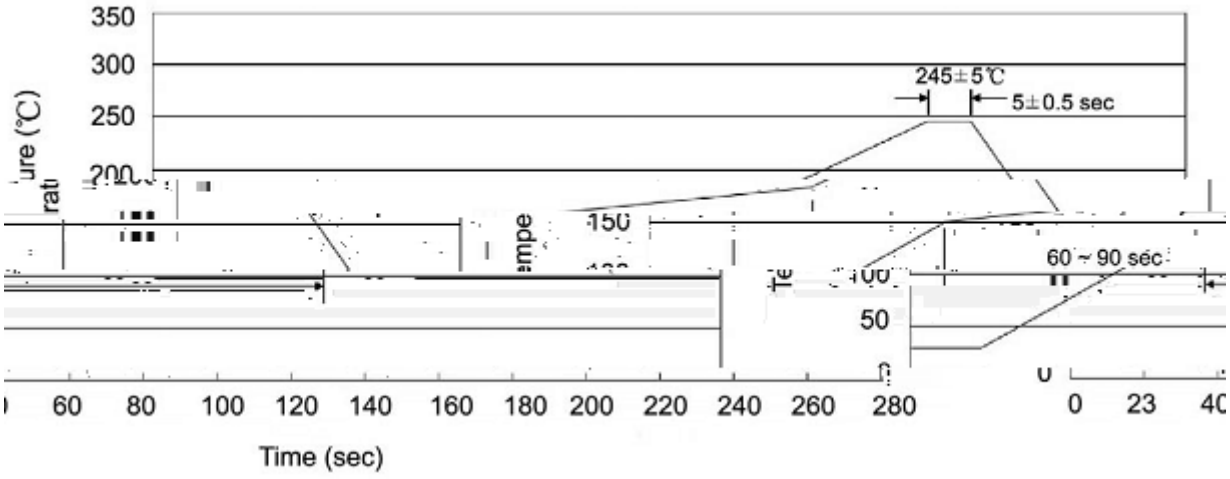
H χ ѭ ҳ и Ґ

CAC χ ѭ ҙ N Ґ

-- χ ѭ ı ғ ӈ̆ N Ґ ı ₺ ı ғ ӈ̆ N Ψ ק

Note:

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



ب ˝ χ

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

2 Š Ë □ ẙ 245 ° 5 ɬ ı `H ڑ `Y ⅈ 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.

ⅈ ŭ ɋ ˉ `Y Ţ / Resistance to Soldering Heat Test Conditions

□ ẙ χ 260 ° 5 ɬ	`H 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

ä ѵ ŗ Ѽ / Notices