/ Descriptions

VRW056 Ṃ Ṃ Ŀ QSQ Æ Ṁ ɥ s ǁ ˥ Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

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Low C_{ob}.

/ Applications

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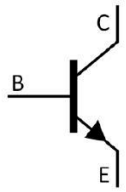
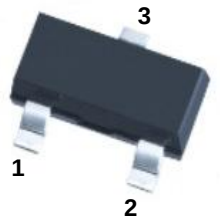
High-frequency amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

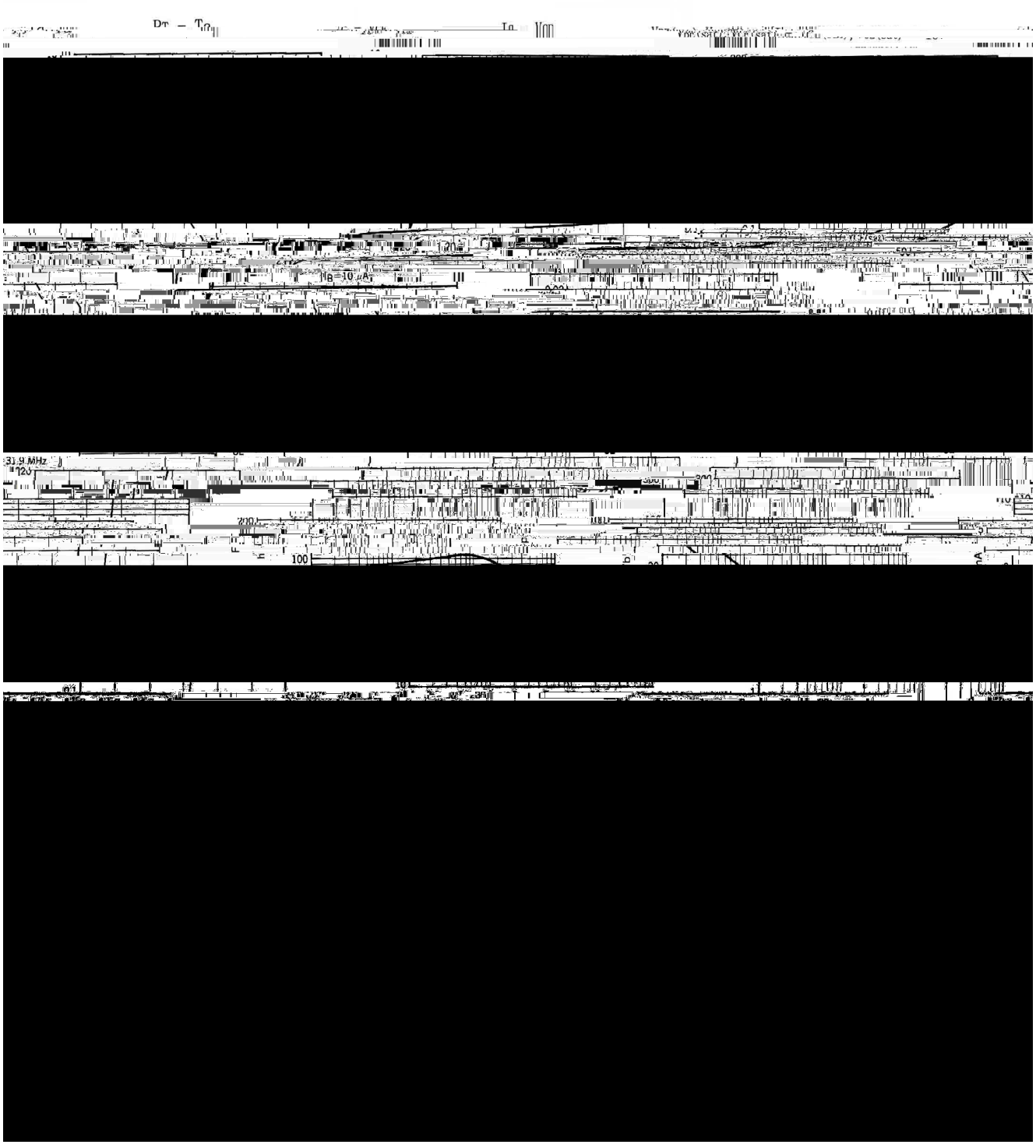
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	N	P	Q
h_{FE} Range	56 120	82 180	120 270
Marking	HAN	HAP	HAQ

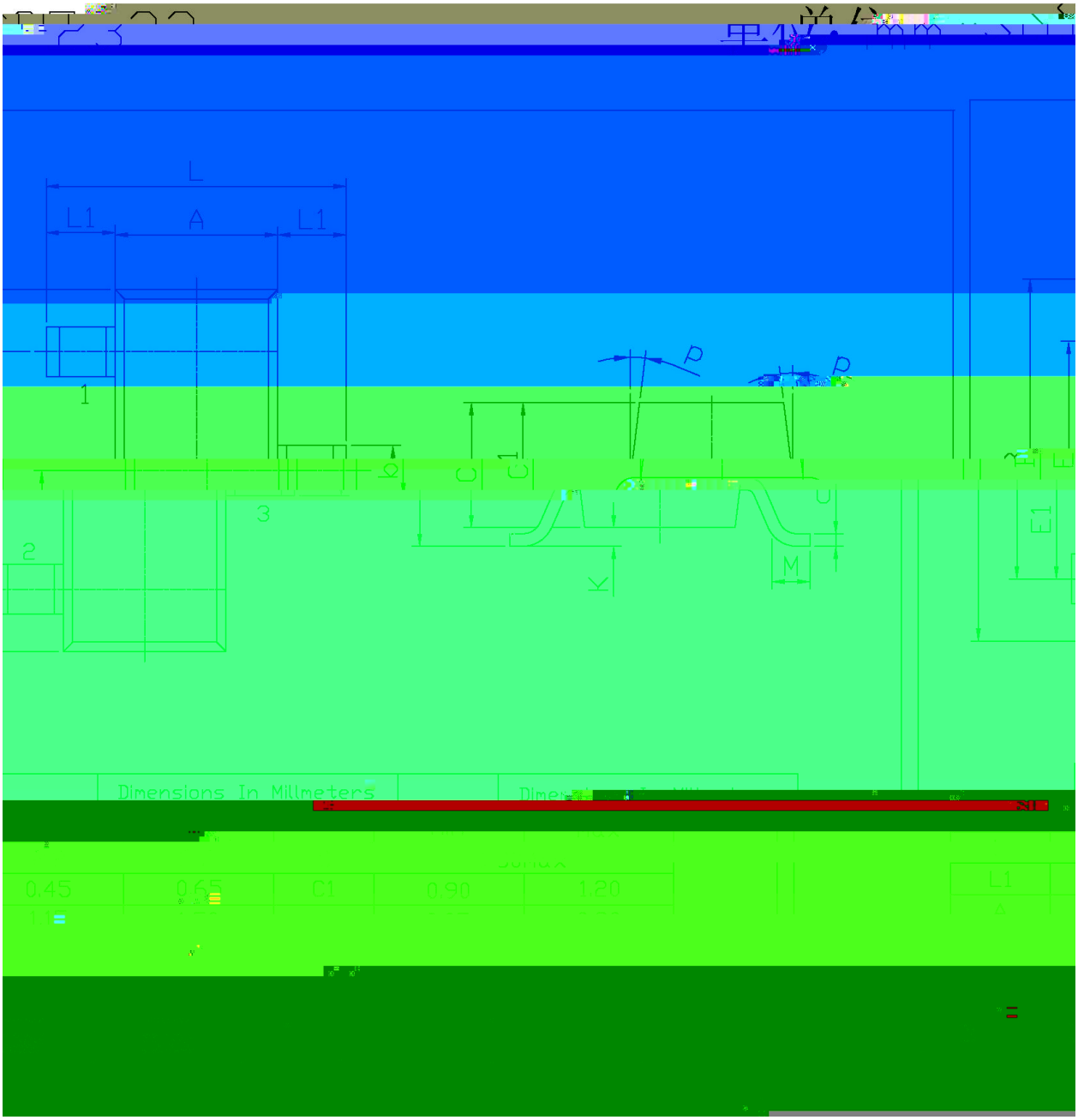
v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

v ̈Ω̣ Parameter	ɬ N Symbol	⊥ ;ˇ Ţ Test Conditions	ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ᶻ Ö Max	D Ɉ Unit
Collector- Base Breakdown Voltage	V_{CBO}	I_C =50μA I_E=0	40			V
Collector-Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	25			V

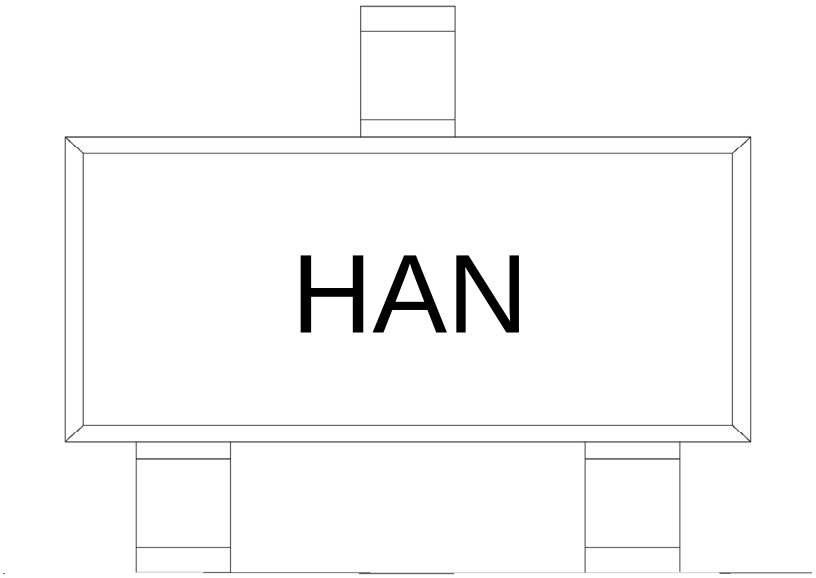
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



ب ˝ χ

K χ ⰼ ʒ ᴵ Ɒ

D χ ⰼ ʒ ᴺ Ɒ

Q χ ⰼ h_{FE} ⁶ ⱪ Ɒ

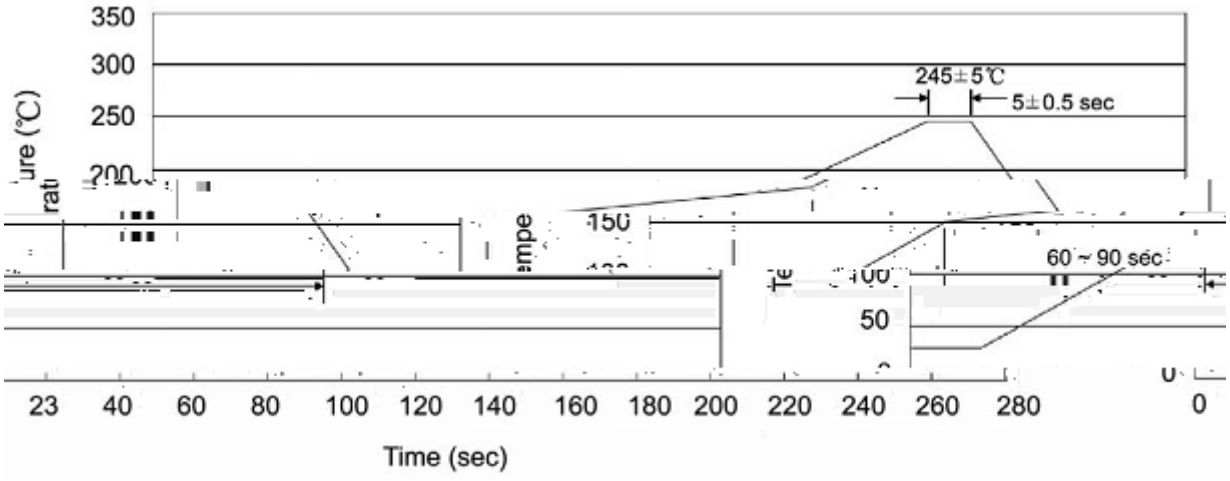
Note:

K χ Company Code

D χ Product Type Code

Q χ h_{FE} Classifications Symbol Code

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



ب ˝ χ

1 ⺊ ♬ □ ỷ 25 Ḱ 150 ɬ ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ỷ 245 ° 5 ɬ ı `H ڑ ˋY ⺈ ⺮ 5 ° 0.5sec;

3 ì ˙ ⺋ ˛ ɔ ⺌ ỷ ⺮ 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.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ɬ `H ڑ χ 10 ° 1 sec. Temp.:260 ° 5 ɬ Time:10 ° 1 sec

/ Packaging SPEC.

ɔ` γ ⺊ / 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