/ Descriptions

VRW056 ṂṂ Ḫ QSQ ÆṀ ч s ‖ ㄱ Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

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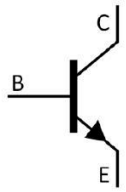
Low C_{ob}.

/ Applications

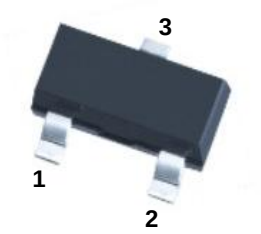
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High-frequency amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

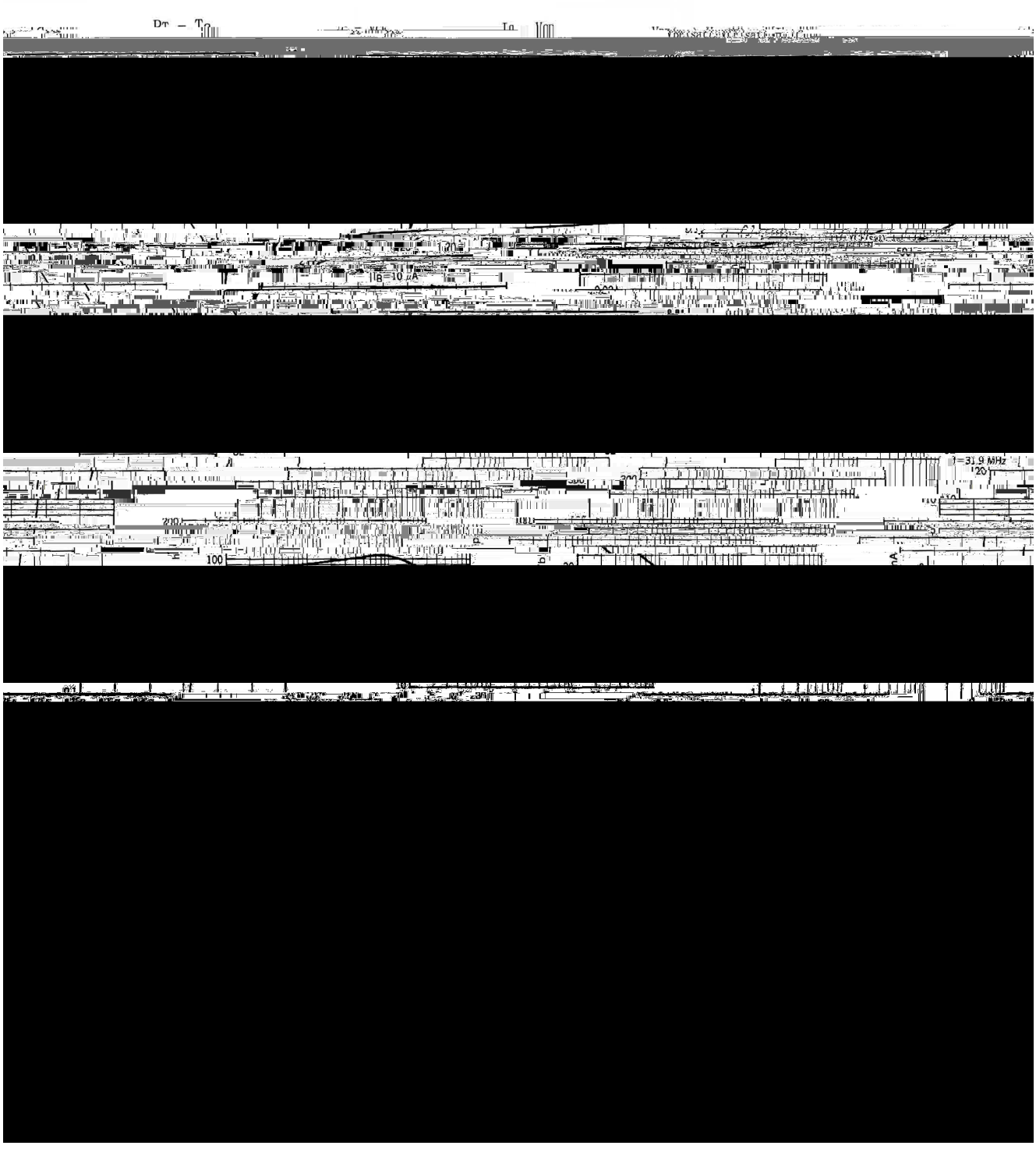
/ h_{FE} Classifications & Marking

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

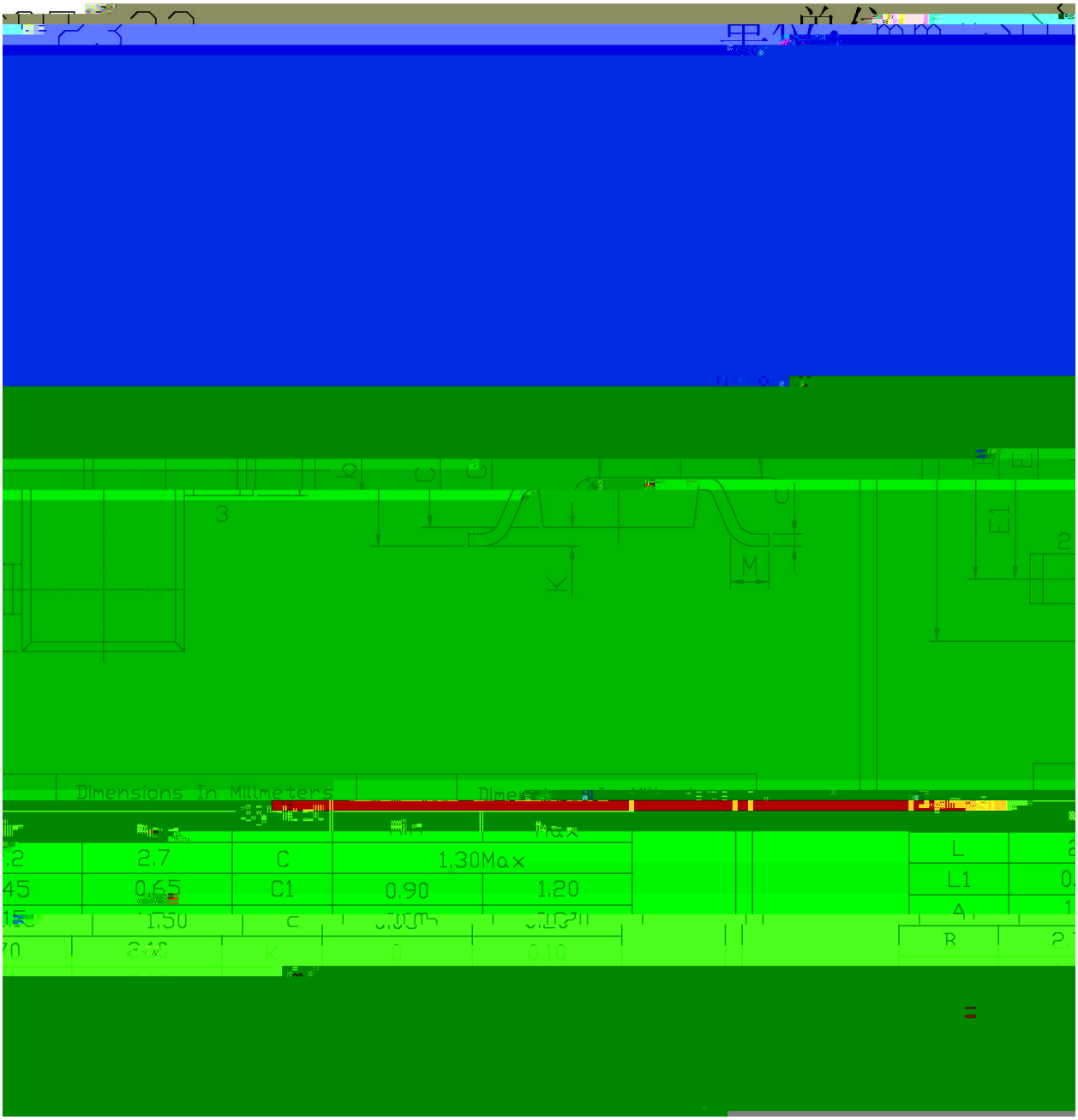
v ˝Ω Parameter	٩ N Symbol	˝Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

v ˝Ω Parameter	٩ N Symbol	Ш :ˆ ţ Test Conditions	ώ ņ Ö Min	Ɛ ʒ Ö Typ	ώ ² Ö Max	D Ч 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

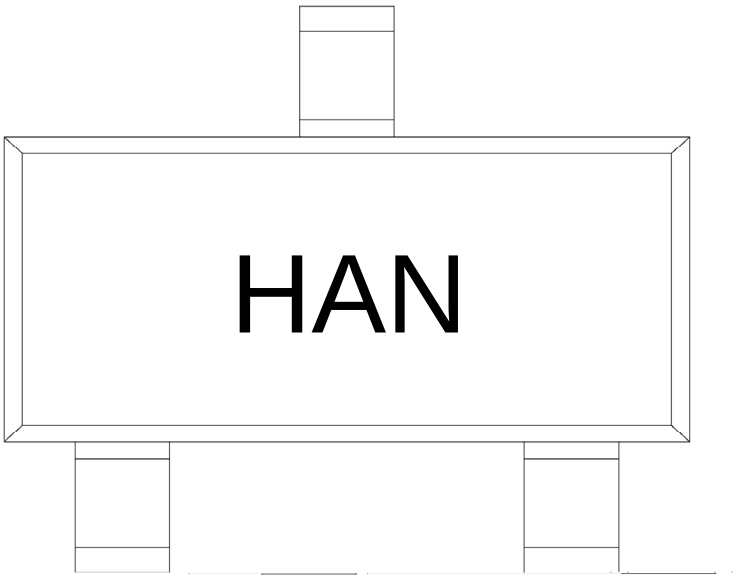
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



ᵕ ˝ χ

K χ ᵻᵡ ᵌ ᵎ ᵑ ᵏ

D χ ᵻᵡ ᵋ ᵑ ᵏ

Q χ ᵻᵡ h_{FE} ᵎ ᵏ ᵏ

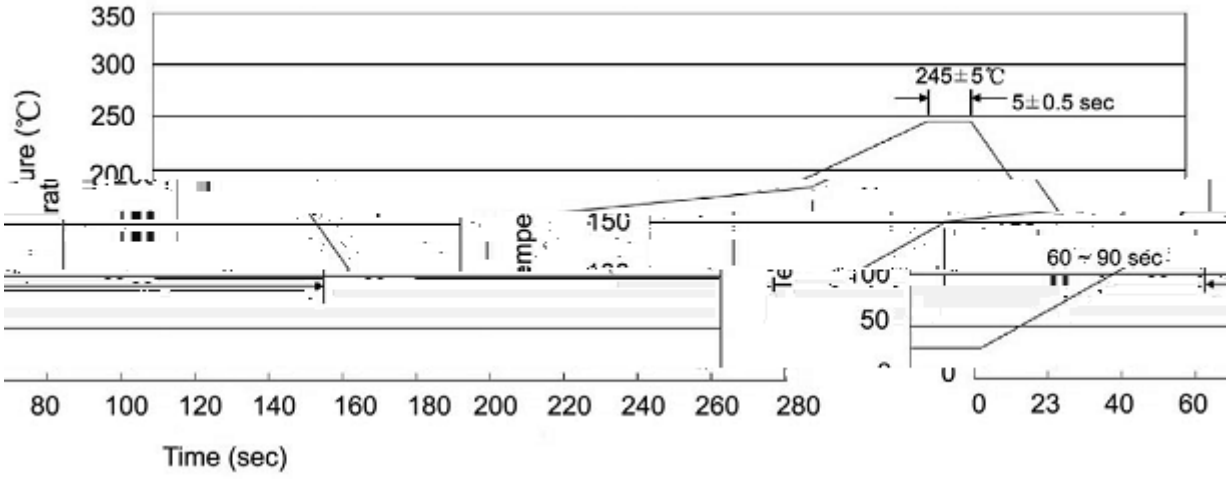
Note:

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 Ĺ ♬ □ ỷ 25 Ḱ 150 ł ı ˋH ڑ 60 Ḱ 90sec;

2 Š Ө □ ỷ 245 ° 5 ł ı ˋH ڑ ˋY ㅅ ㎛ 5 ° 0.5sec;

3 ì ˙ ㅣ ˛ ɔ ѡ ỷ ㎛ 2 Ḱ 10 ł /sec.

Note:

1.Preheating:25~150 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 ˋH ڑ χ 10 ° 1 sec. Temp.:260 ° 5 ł Time:10 ° 1 sec

/ Packaging SPEC.

ɔ ` ㅣ Ł / 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