

/ Descriptions

VRW056 ММ Ё QSQ Æ M ы s ll 1 Silicon NPN transistor in a SOT-23 Plastic Package.

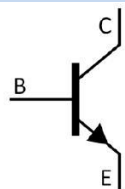
/ Features

Нu g ll ґ, ɔ k ȳ
Low C_{ob}.

/ Applications

ȦȦȦ ˘ ɹ l Ȧ Ȧ
High-frequency amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

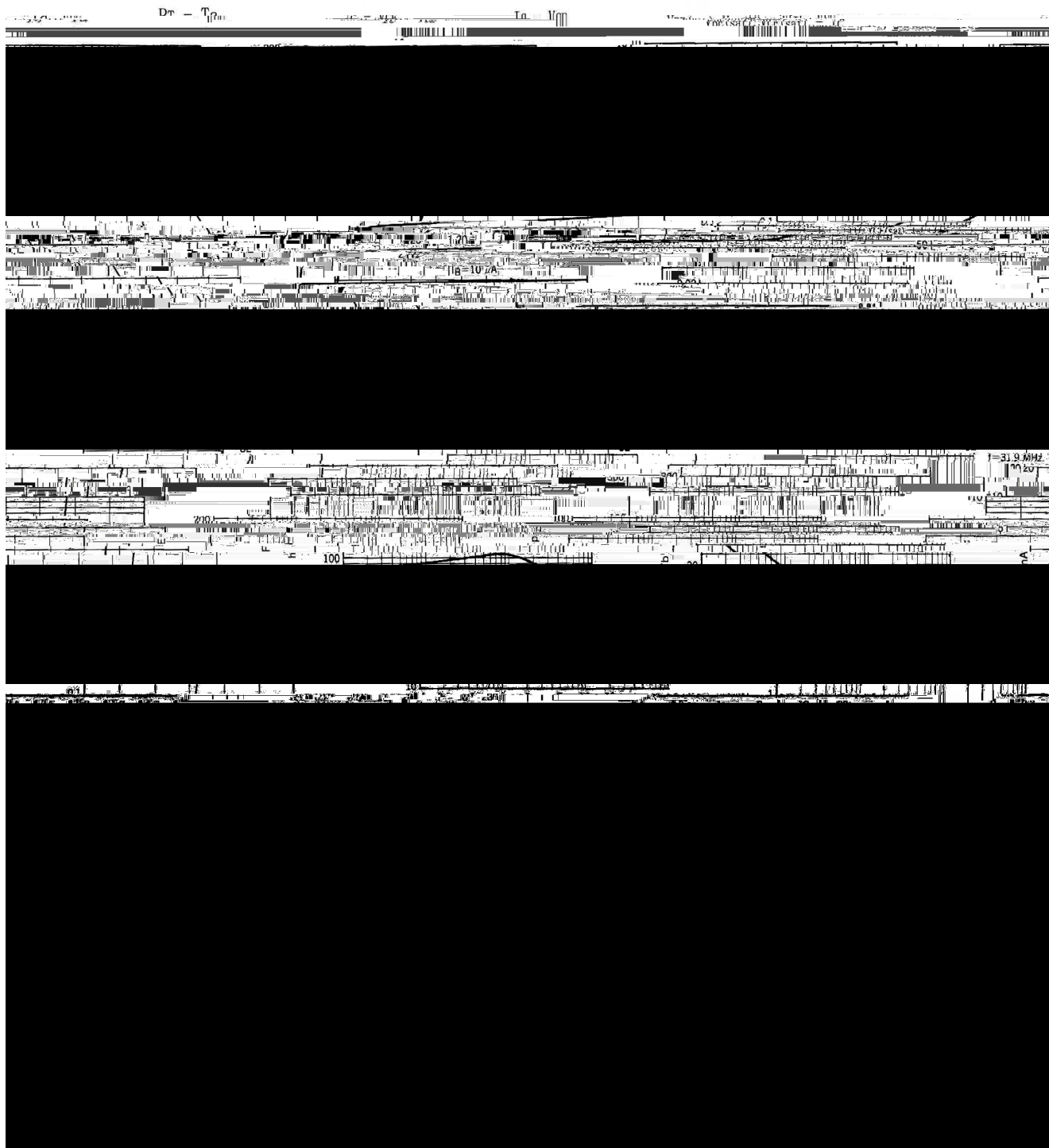
/ h_{FE} Classifications & Marking

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

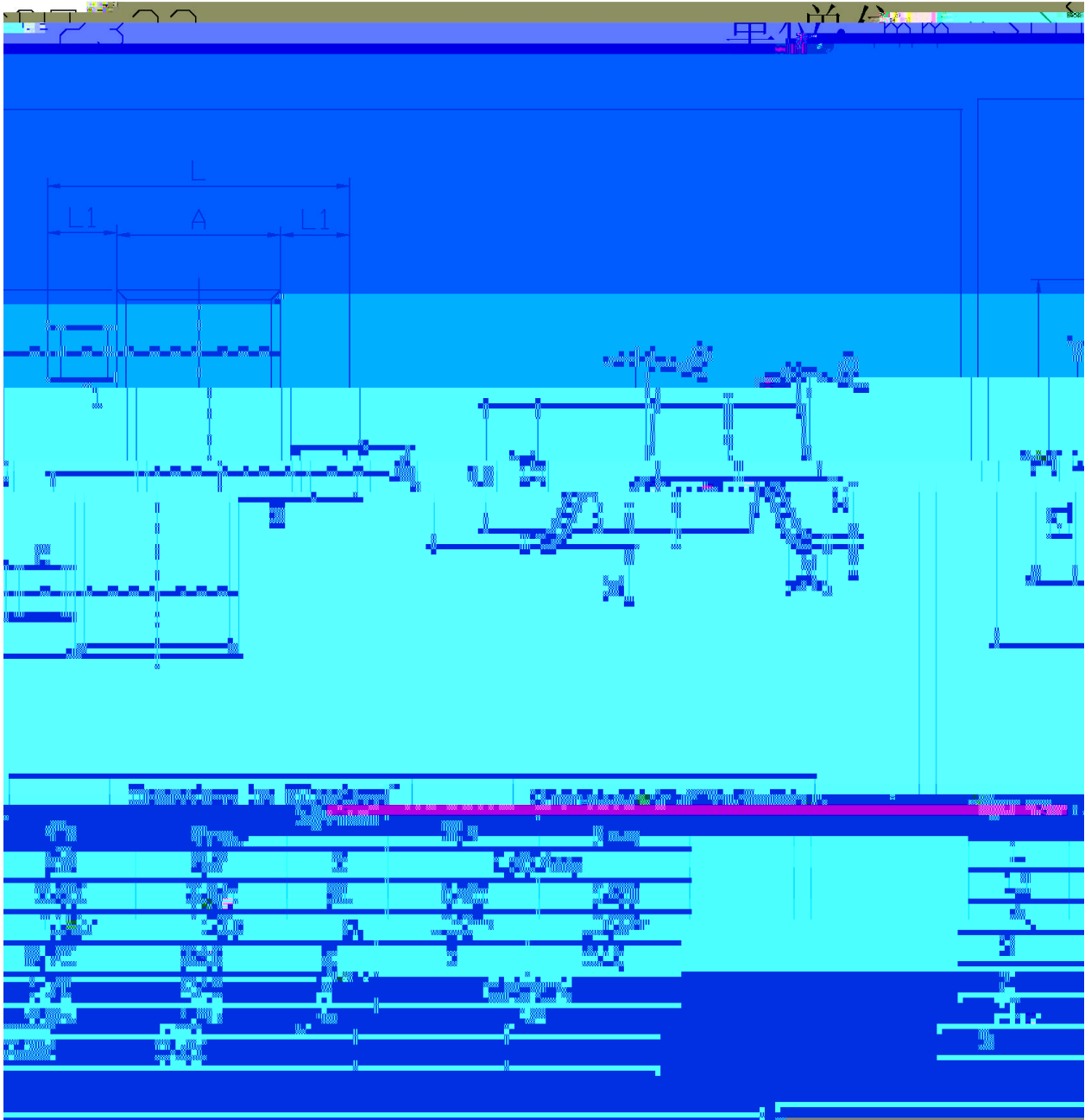
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- Base Breakdown Voltage	V_{CBO}	$I_C = 50\mu A$ $I_E = 0$	40			V
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C = 1.0mA$ $I_B = 0$	25			V

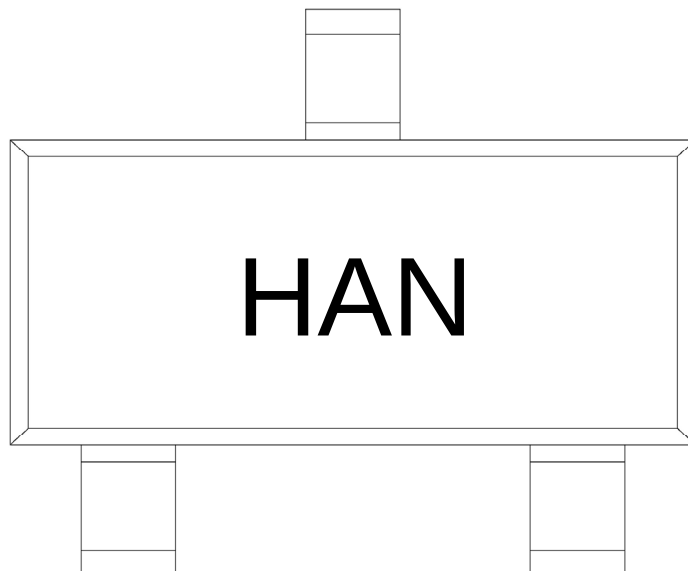
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



б " х

K х № з " Пб

D х № з " Пб

Q х № h_{FE} ° К Пб

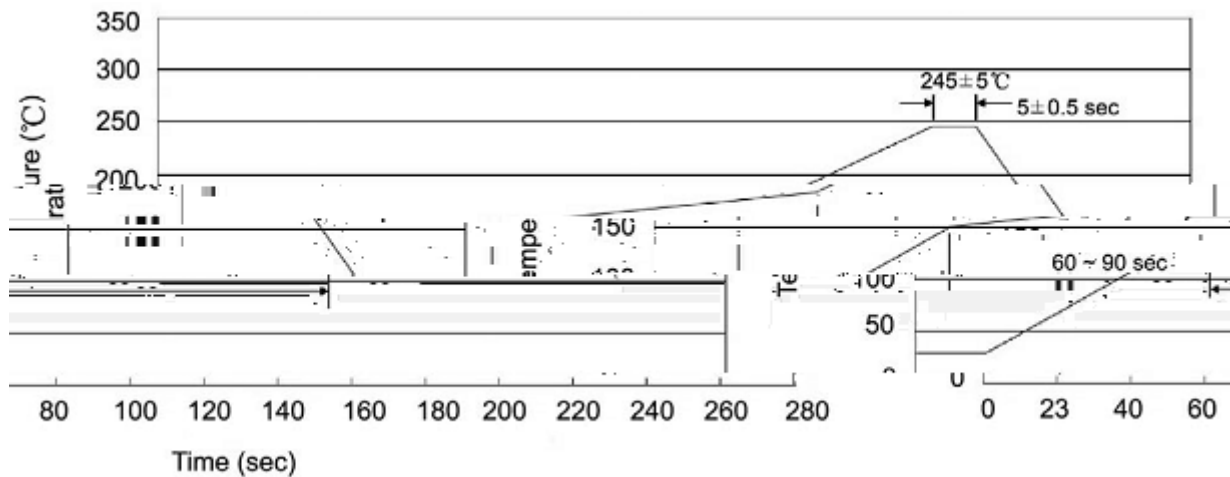
Note:

K х Company Code

D х Product Type Code

Q х h_{FE} Classifications Symbol Code

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



1. 预加热: 25~150 °C, Time: 60~90sec;
2. 峰值温度: 245±5 °C, 持续时间: 5±0.5sec;
3. 冷却速度: 2~10 °C/sec.

- Note:
1. Preheating: 25~150 °C, Time: 60~90sec.
 2. Peak Temp.: 245±5 °C, Duration: 5±0.5sec.
 3. Cooling Speed: 2~10 °C/sec.

/ Resistance to Soldering Heat Test Conditions

□ 预加热: 260±5 °C, Time: 10±1 sec. Temp.: 260±5 °C Time: 10±1 sec

/ Packaging SPEC.

□ 包装 / 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