VRW056 ṂṂ Ł QSQ ÆṀ ɥ s ǁ ˥ Silicon NPN transistor in a SOT-23 Plastic Package.

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Good linerarity of f_T.

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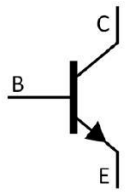
High frequency, VHF band amplifier application.





PIN 1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

/ h_{FE} Classifications & Marking

h_{FE} Range	20~200
Marking	HHH

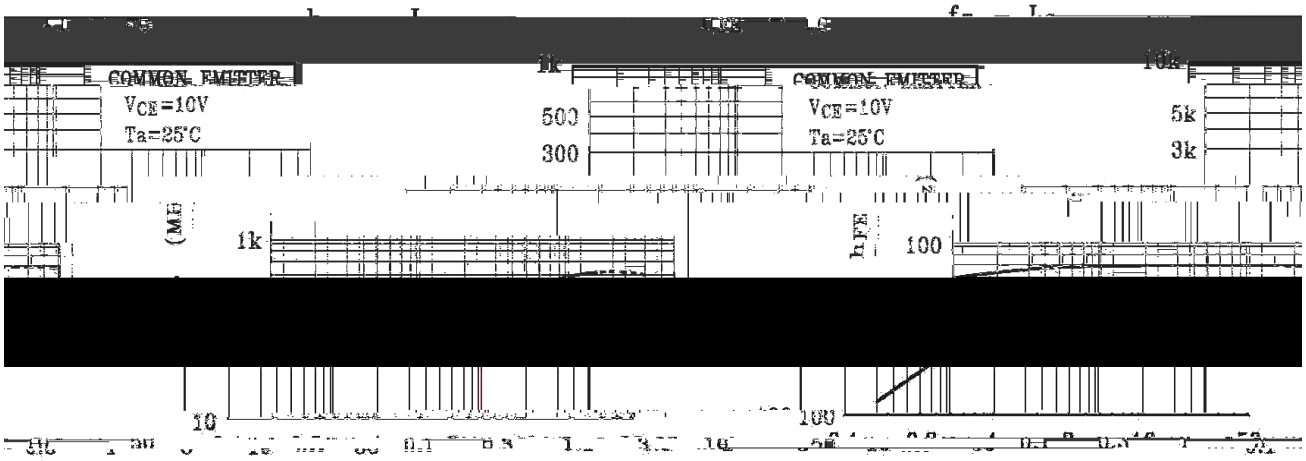
/ Absolute Maximum Ratings(Ta=25)

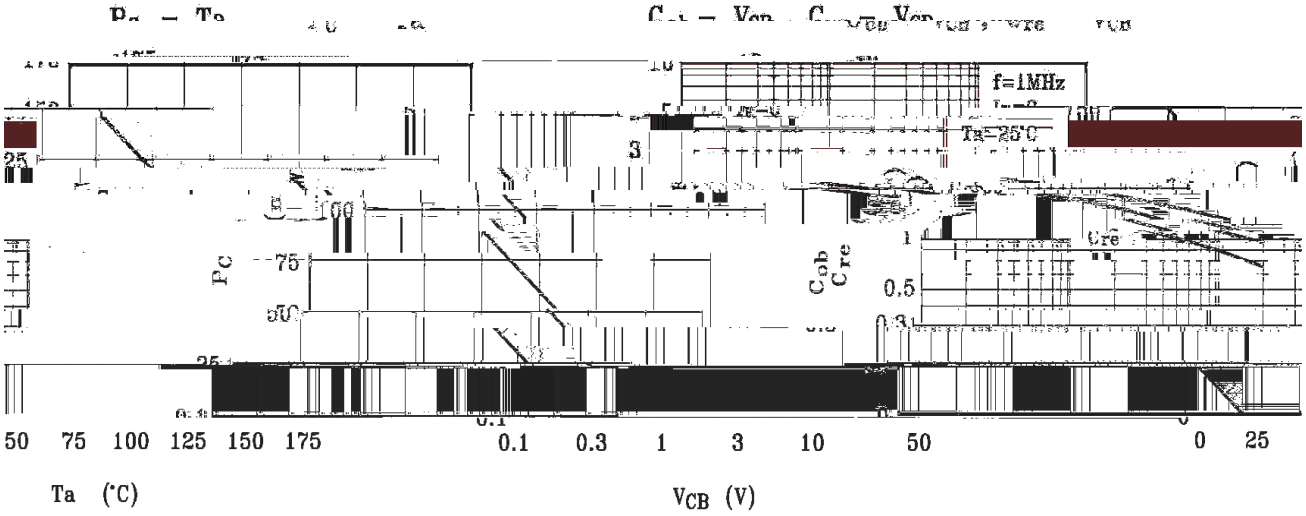
v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	50	mA
Base Current	I_B	25	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55˙ 150	

/ Electrical Characteristics(Ta=25)

v ̈Ω̣ Parameter	ɬ N Symbol	⊥⊥ ;ˇ Ţ Test Conditions	ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ʑ Ö Max	D Ɉ Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=10mA	25			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=30V I_E=0			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=3.0V I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=10V I_C=10mA	20	70	200	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=15mA I_B=1.5mA			0.2	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=15mA I_B=1.5mA			1.5	V
Transition Frequency	f_T	V_{CE}=10V I_C=10mA	250	600		MHz
Output Capacitance	C_C	V_{CB}=10V I_E=0 f=1.0MHz		1.1	1.6	pF
Collector- Base Time Constant	Cc.rbb	V_{CB}=10V I_E=1.0mA f=30MHz			25	pS

/ Electrical Characteristic Curve

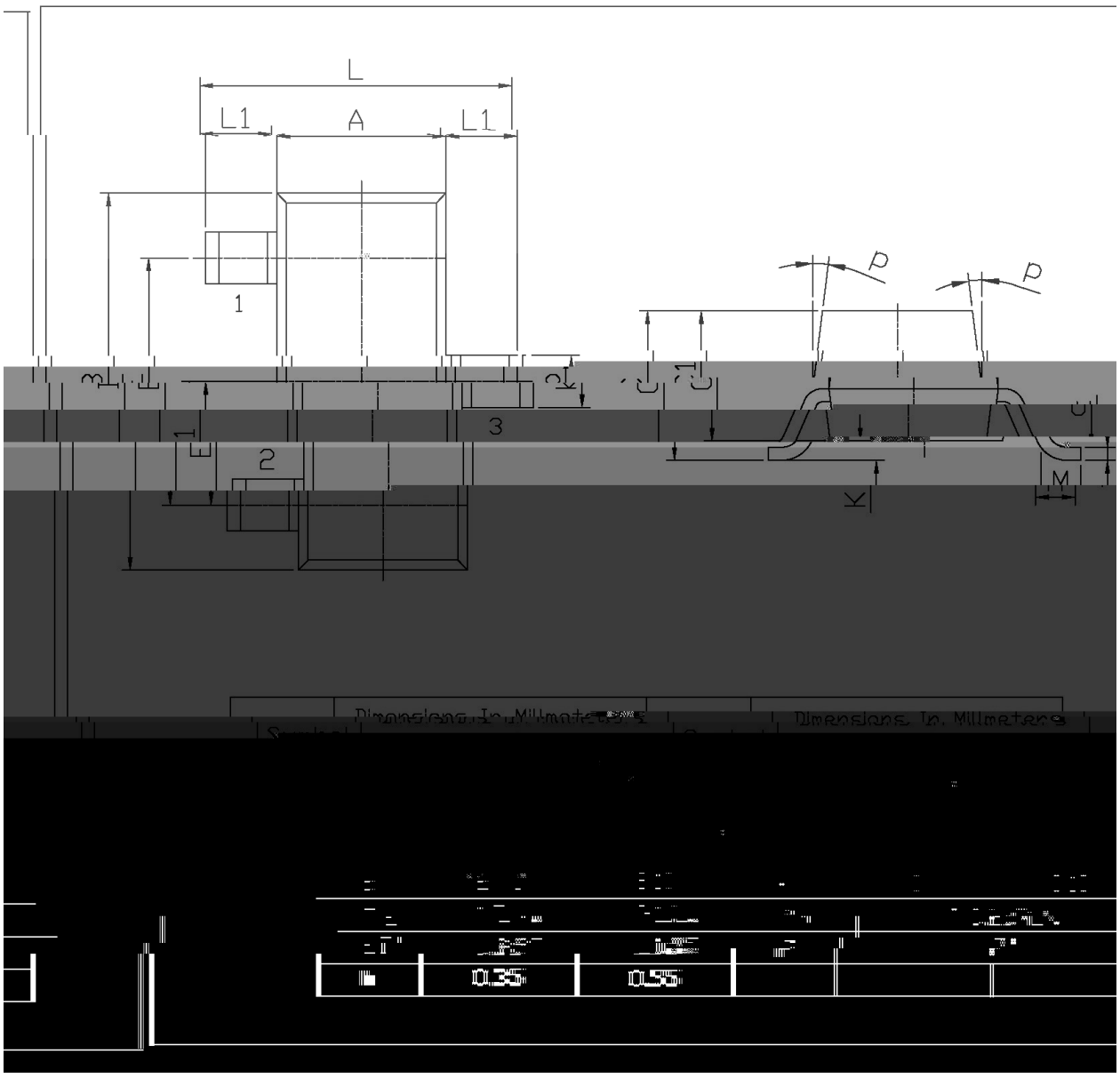




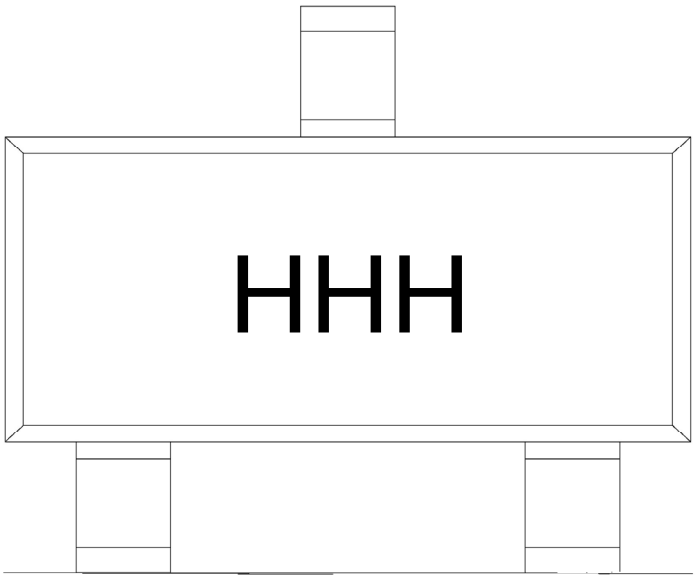
/ Package Dimensions

SOT-23

单位：mm



/ Marking Instructions



ب ˝ χ

K χ ⌘ ⅈ ᴵ Ɒ

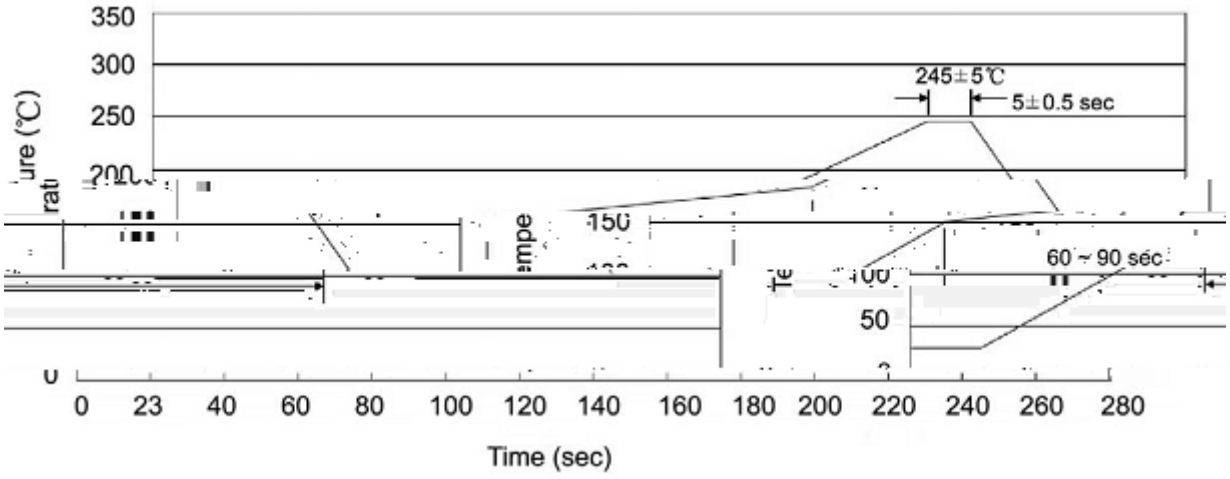
HH χ ⌘ ⅉ ᴺ Ɒ

Note:

K χ Company Code

HH χ Product Type

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



ب ˝ χ

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

2 Š Ö □ ỷ 245 ° 5 ɬ ı `H ڑ ˙Y ⺈ ⺾ 5 ° 0.5sec;

3 ì ˙ ⺈ ˛ ɔ ھ ỷ ⺾ 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 ⊢ / REEL

Package Type Units