"Yب / Descriptions

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

◕È / Features

лъ P PEWD88 Йį ´

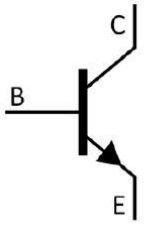
Complementary to MMBTA55.

ѵ ڍ / Applications

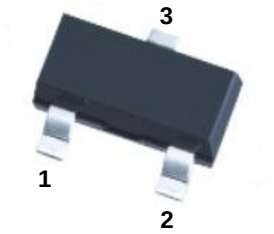
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Ideal for medium power amplification and switching.

Лق ặ ≠ ɛ / Equivalent Circuit



ẫ ɹ ὺ / Pinning



PIN1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

₺. ʜ ↄ / Marking

h_{FE} Range	100 300
Marking	HK1H

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

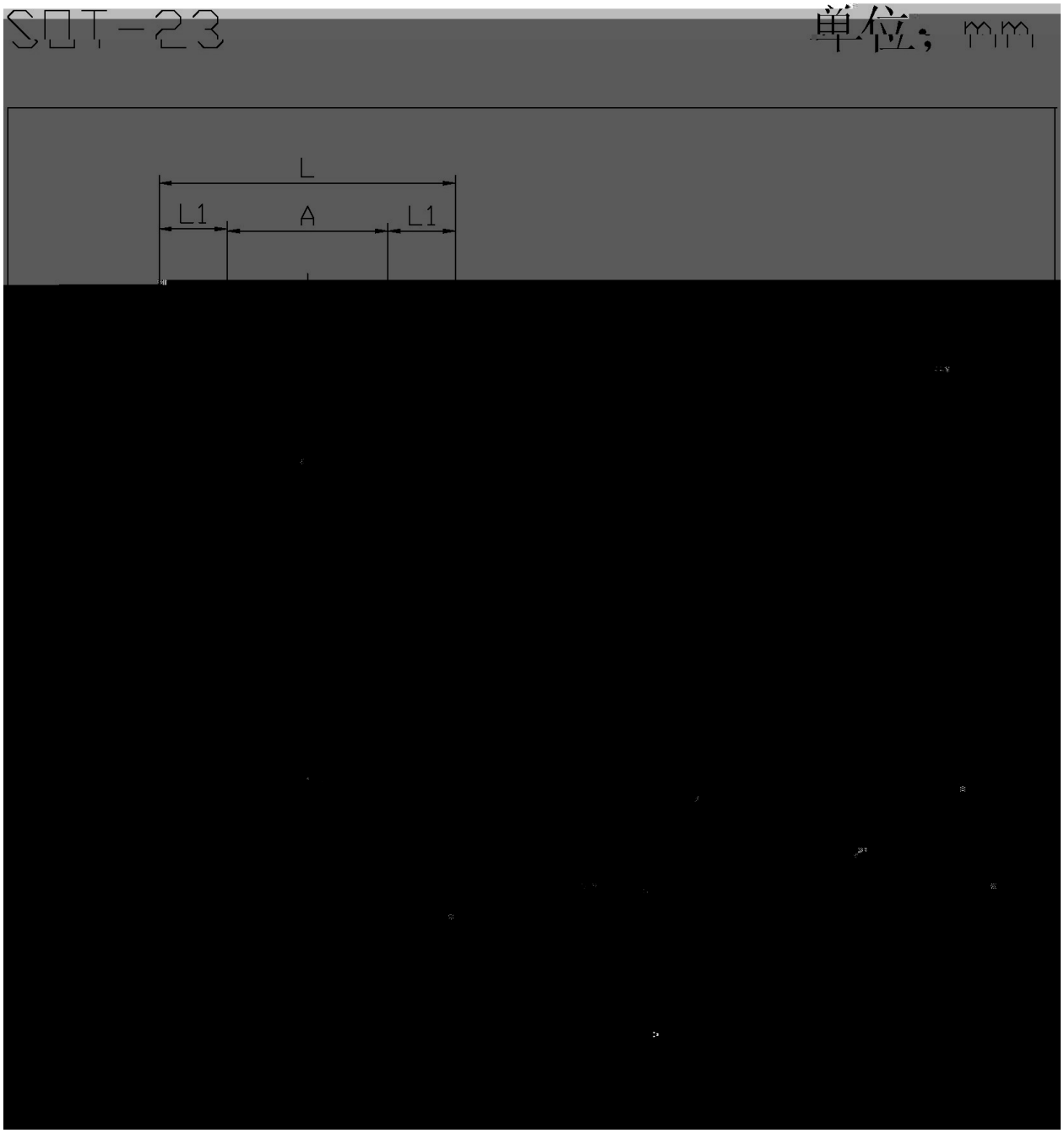
v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ɥ Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	4	V
Collector Current - Continuous	I_C	500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	ł
Storage Temperature Range	T_{stg}	-55 Ḱ 150	ł

ɜ ʌ Ξ ̊Ą / Electrical Characteristics(Ta=25 ɹ)

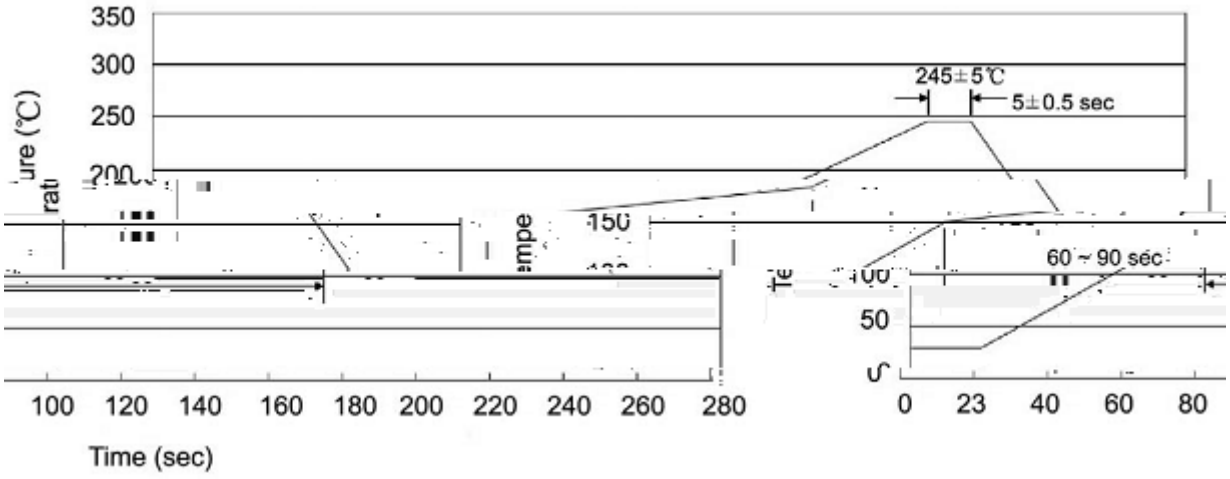
v ̈Ω Parameter	ϒ N Symbol	╨ ː ϯ ţ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ᶻ Ö Max	D Ɥ Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=100μA I_E=0	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	60			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=100μA I_C=0	4.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60 V I_E=0			0.1	μA
Collector Cut-Off Current	I_{CES}	V_{CE}=60V I_E=0			0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=1.0V I_C=100mA	100		300	
	$h_{FE(2)}$	V_{CE}=1.0V I_C=10mA	100		300	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA I_B=10mA			0.25	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=100mA I_B=10mA			1.2	V
Transition Frequency	f_T	I_C=10mA V_{CE}=2V f=100MHz	100			MHz

MMBTA05

ᵘ ĖÒĻ ʃ / Package Dimensions



ѭ ʃ ╕ ẘ ´E ѵ ʃ (ѽ ѯ) / Wh p shudwxuh Suril◊h i ru LU Uhi◊r z Vr◊ghulq j+Se◊luhh,



ب ˝ χ

1 Ĺ ♬ □ ẙ 25 Ќ 150 ɬ ı ˋH ڑ 60 Ќ 90sec;

2 Š Ë □ ẙ 245 ° 5 ɬ ı ˋH ڑ ˋY ѧ ѭ 5 ° 0.5sec;

3 ì ˙ ϒ ˛ ɔ ѡ ẙ ѭ 2 Ќ 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.

ѧ ü q ˉ ˋY Ţ / Resistance to Soldering Heat Test Conditions

□ ẙ χ 260 ° 5 ɬ	ˋH ڑ χ 10 ° 1 sec.	Temp:260 ° 5 ɬ	Time:10 ° 1 sec

ѳ Ł ϶ — / Packaging SPEC.

ɔ ` ϒ Ł / REEL

Package Type	Units