

一、概述 / Descriptions

VRW056 硅 NPN 三极管 封装 SOT-23 塑料封装。 Silicon NPN transistor in a SOT-23 Plastic Package.

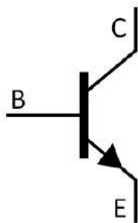
二、特点 / Features

与 MMBTA55 互补。
Complementary to MMBTA55.

三、应用 / Applications

适用于中等功率放大和开关。
Ideal for medium power amplification and switching.

四、等效电路 / Equivalent Circuit



五、引脚 / Pinning



PIN1 基极 Base PIN 2 发射极 Emitter PIN 3 集电极 Collector

六、标识 / Marking

h _{FE} Range	100 300
Marking	HK1H

绝对最大额定值 / Absolute Maximum Ratings(Ta=25 ℃)

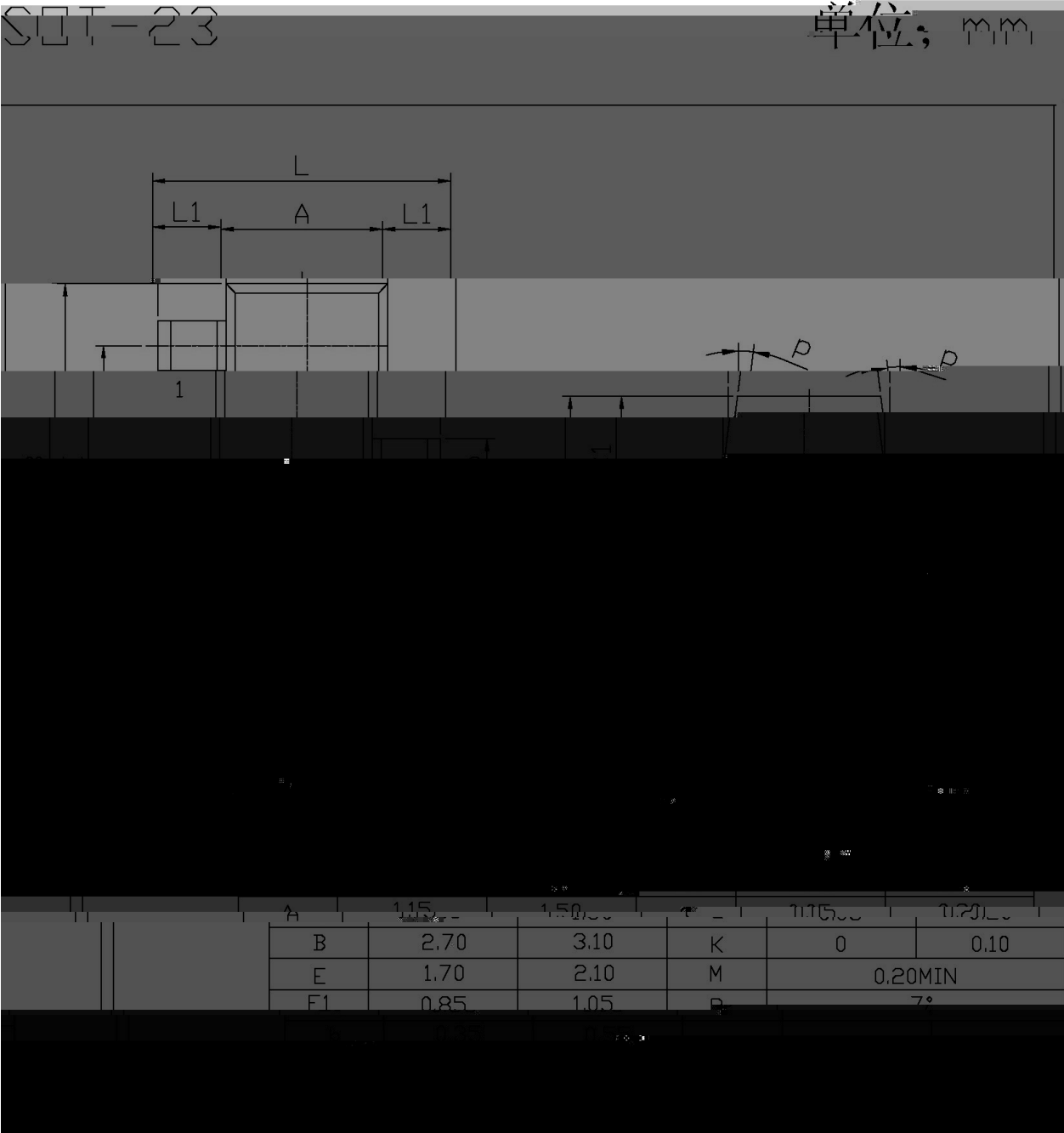
参数 Parameter	符号 Symbol	额定值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	4	V
Collector Current - Continuous	I_C	500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 ~ 150	℃

电 气 特 性 / Electrical Characteristics(Ta=25 ℃)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=100\text{ }\mu\text{A}$ $I_E=0$	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0\text{mA}$ $I_B=0$	60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=100\text{ }\mu\text{A}$ $I_C=0$	4.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60\text{V}$ $I_E=0$			0.1	μA
Collector Cut-Off Current	I_{CES}	$V_{CE}=60\text{V}$ $I_E=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0\text{V}$ $I_C=100\text{mA}$	100		300	
	$h_{FE(2)}$	$V_{CE}=1.0\text{V}$ $I_C=10\text{mA}$	100		300	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}$ $I_B=10\text{mA}$			0.25	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}$ $I_B=10\text{mA}$			1.2	V
Transition Frequency	f_T	$I_C=10\text{mA}$ $V_{CE}=2\text{V}$ $f=100\text{MHz}$	100			MHz

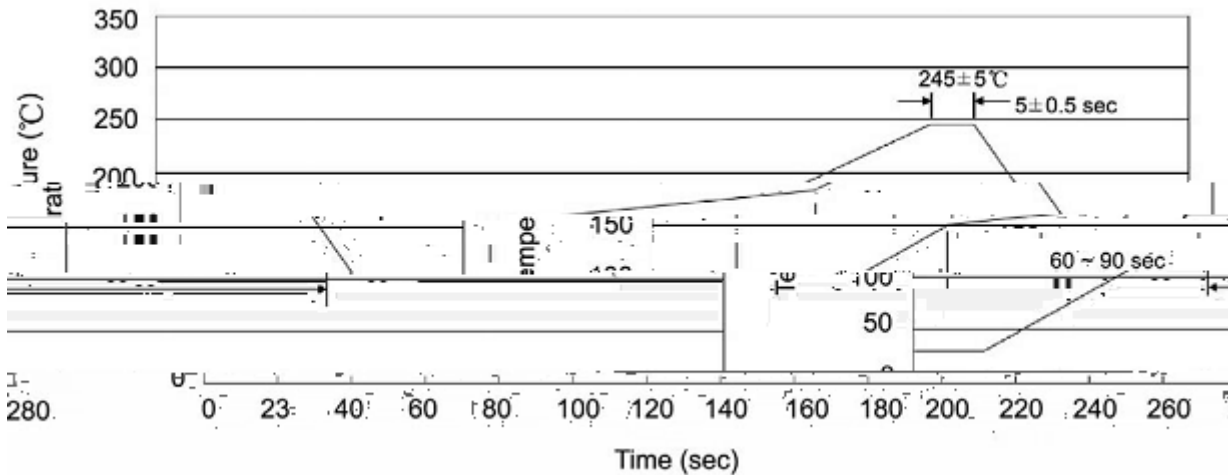
MMBTA05

⌘ È Ò Ì ¢ / Package Dimensions





Thermal Characteristics / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0lueh,



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.

Note:

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2. Peak Temp.: 245±5 °C, Duration: 5±0.5sec.

3. Cooling Speed: 2~10 °C/sec.

Resistance to Soldering Heat Test Conditions

Temp: 260±5 °C, Time: 10±1 sec.

Temp: 260±5 °C

Time: 10±1 sec

Packaging SPEC.

REEL

Package Type	Units	/9	1	Tf 1.1654	Tw 315.0015	866e74	1	Tf 11	0
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