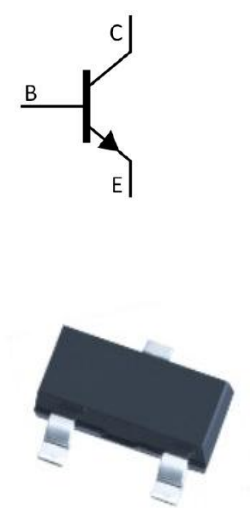


VRW056 ММ Ё QSQ Æ М ы s ll 1 Silicon NPN transistor in a SOT-23 Plastic Package.

ƒ_T ' ≈ 0 B
Good linerarity of f_T.

ƒ_{max} ≈ ƒ n ≈ ƒ 0 z
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

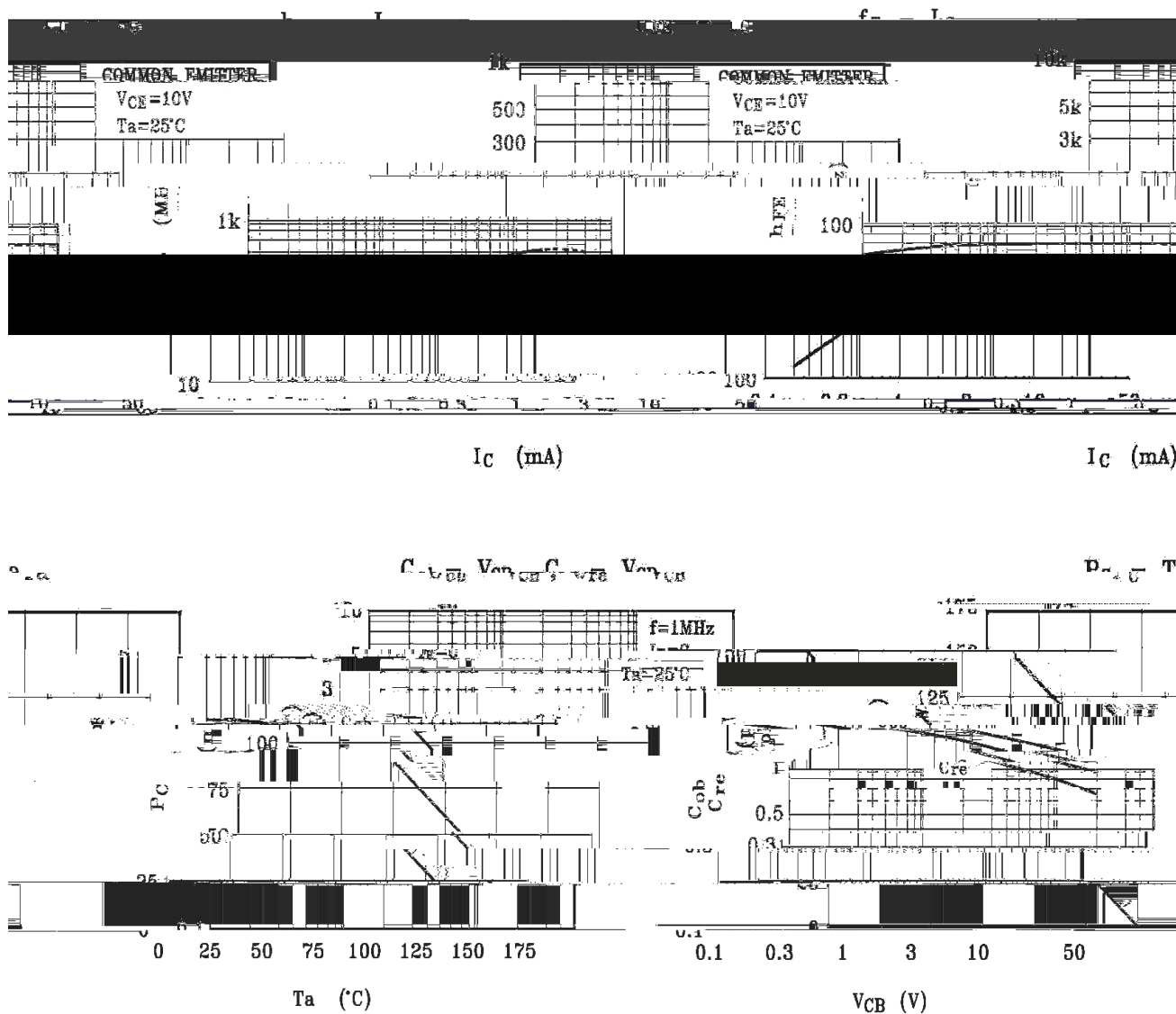
/ Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating	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℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	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	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$		1.1	1.6	pF
Collector- Base Time Constant	$C_{c.rbb}$	$V_{CB}=10V$ $f=30MHz$ $I_E=1.0mA$			25	pS

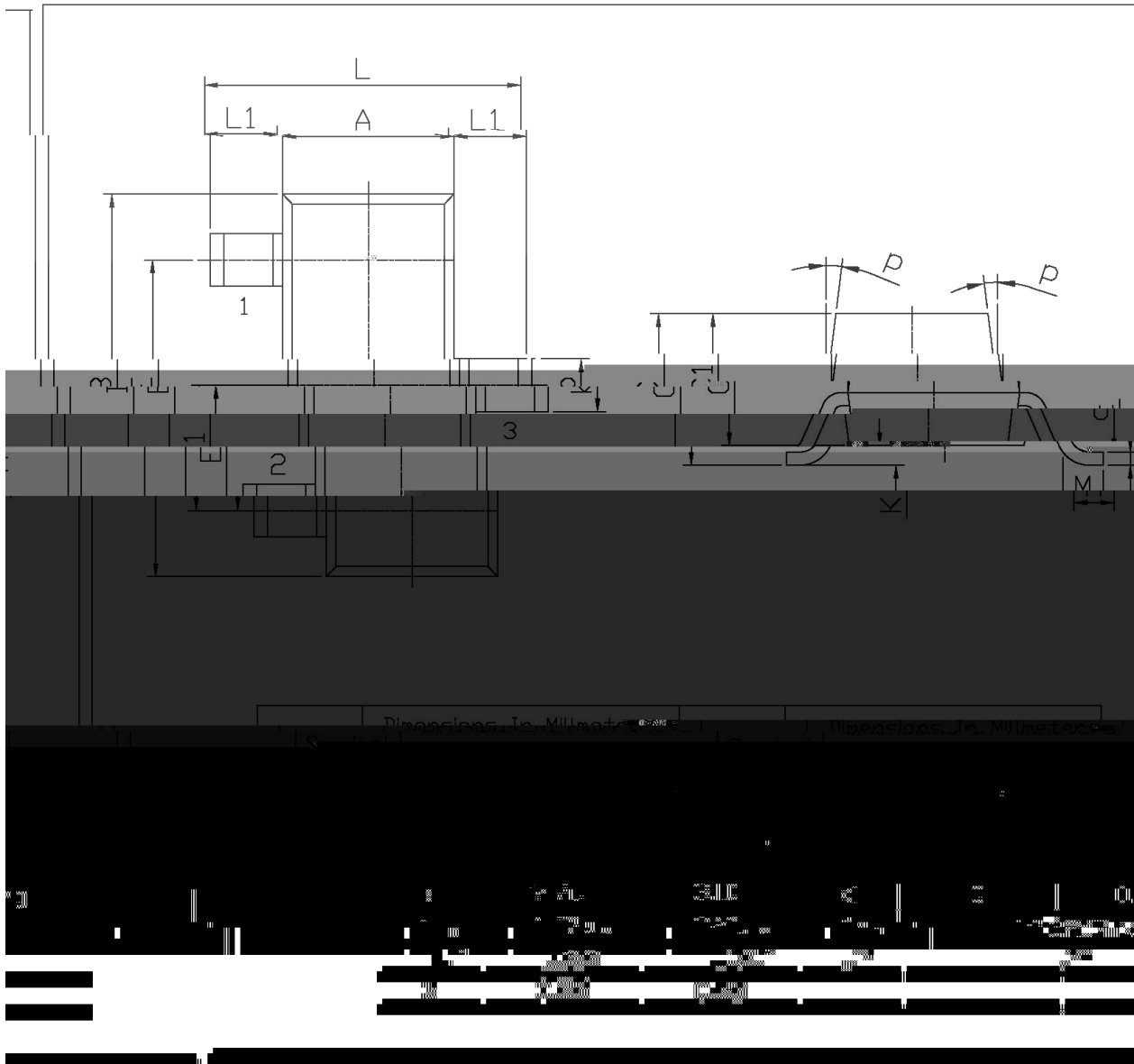
/ Electrical Characteristic Curve



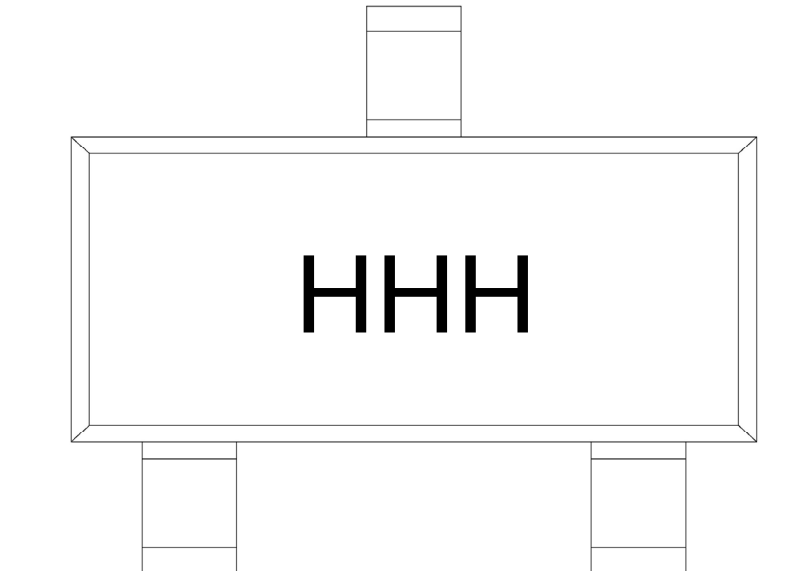
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



б " X

K X № з " П

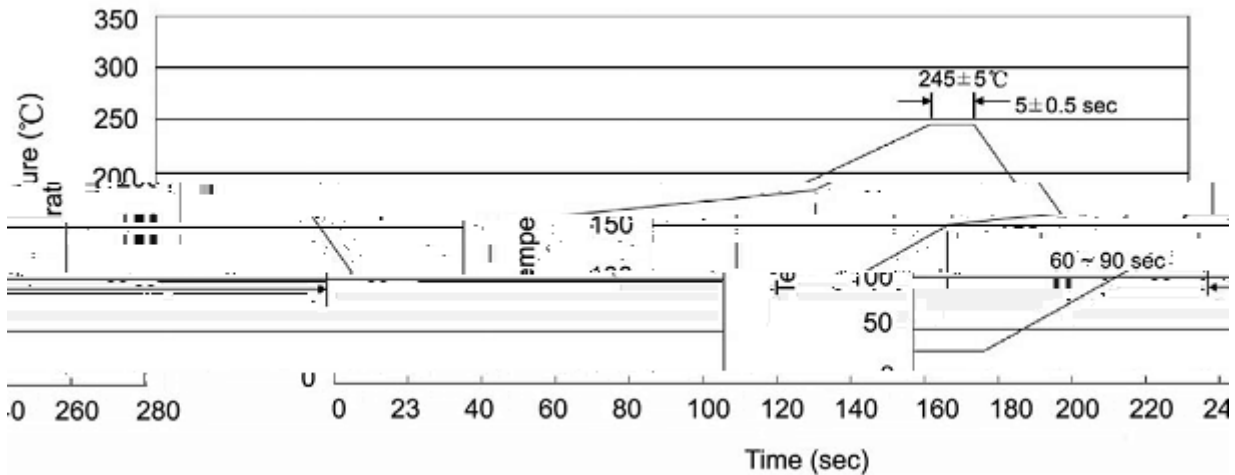
HH X № з " П

Note:

K X Company Code

HH X Product Type

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



℃

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

Note:

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

/ Resistance to Soldering Heat Test Conditions

□ 预加热: 260±5℃, 时间: 10±1 sec. Temp.: 260±5℃ Time: 10±1 sec

/ Packaging SPEC.

□ 卷带 / REEL

Package Type

Units 1