

2SC536M/KM

Rev.F Apr.-2017

描述 / Descriptions

SOT-23 塑封封装 NPN 半导体三极管。Silicon NPN transistor in a SOT-23 Plastic Package.

特征 / Features

大电流容量，宽阔的安全工作区。

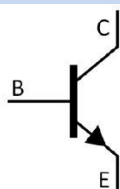
Large current capacity and wide ASO.

用途 / Applications

用于小信号一般放大电路。

Small signal general purpose amplifier applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : Base PIN 2 : Emitter PIN 3 : Collector

放大及印章代码 / h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	D	E	F	G	H
h_{FE} Range	60~120	100~200	160~320	280~560	480~960
Marking	H53D	H53E	H53F	H53G	H53H

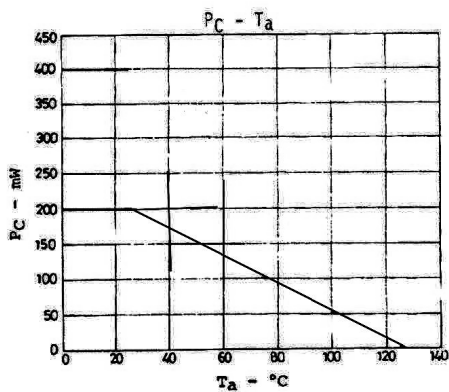
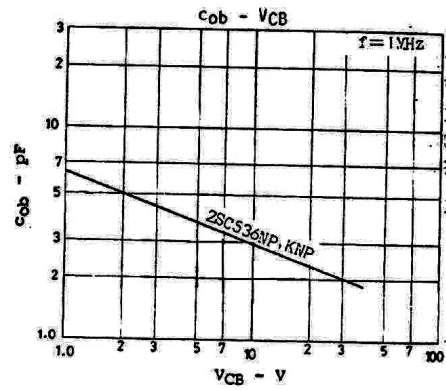
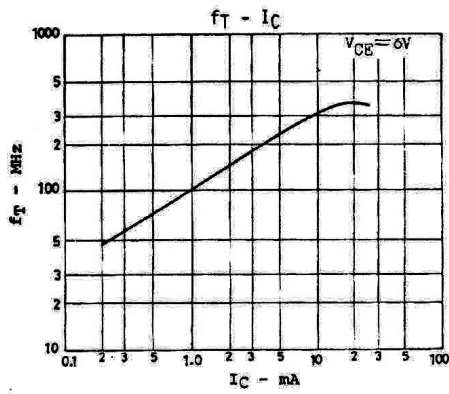
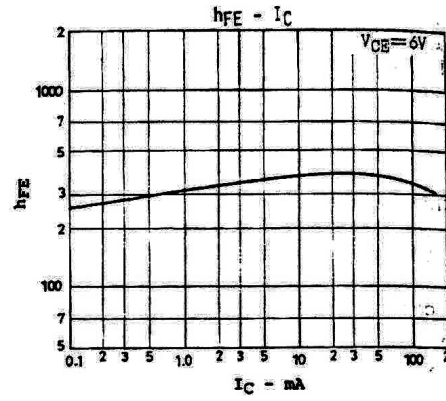
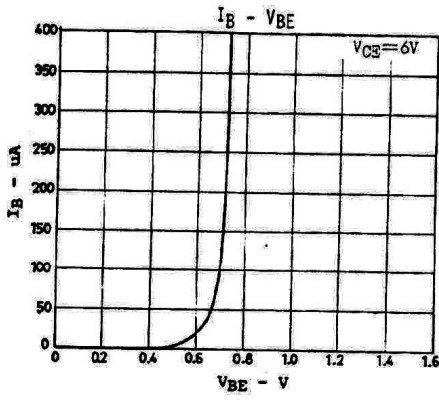
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter		符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	2SC536M 2SC536KM	V_{CBO}	40 55	V
Collector to Emitter Voltage	2SC536M 2SC536KM	V_{CEO}	30 50	V
Emitter to Base Voltage		V_{EBO}	5.0	V
Collector Current		I_C	100	mA
Collector Current(pulse)		I_{CP}	300	mA
Collector Power Dissipation		P_C	250	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C

电性能参数 / Electrical Characteristics(Ta=25°C)

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 Cut-Off Current	I_{CBO}	$V_{CB}=35V$ $I_E=0$			1.0	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=4.0V$ $I_C=0$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=6.0V$ $I_C=1.0mA$	60		960	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=50mA$ $I_B=5.0mA$			0.5	V
Transition Frequency	f_T	$V_{CE}=6.0V$ $I_C=1.0mA$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6.0V$ $f=1.0MHz$ $I_E=0$		3.5		pF
Collector- Base Time Constant	$C_{C-rbb'}$	$V_{CB}=6.0V$ $f=31.9MHz$ $I_C=1.0mA$		250		pS

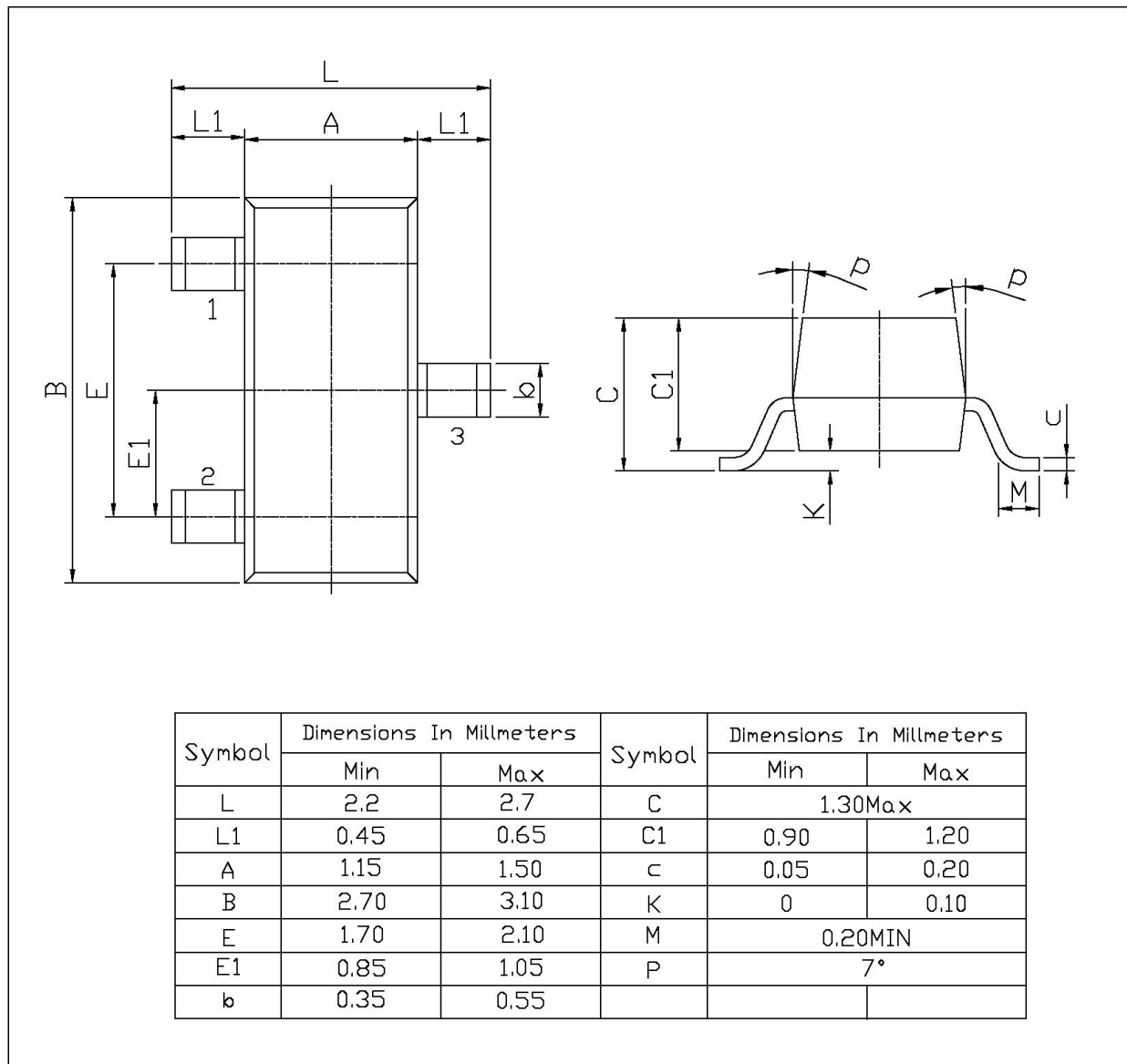
电参数曲线图 / Electrical Characteristic Curve



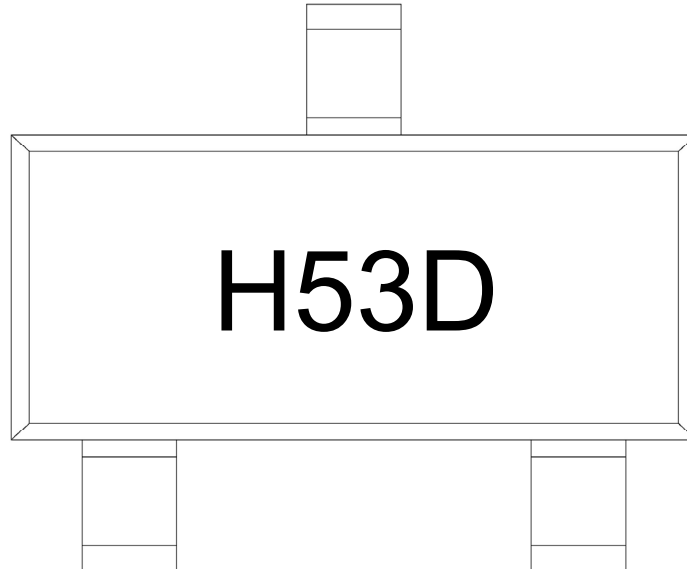
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions

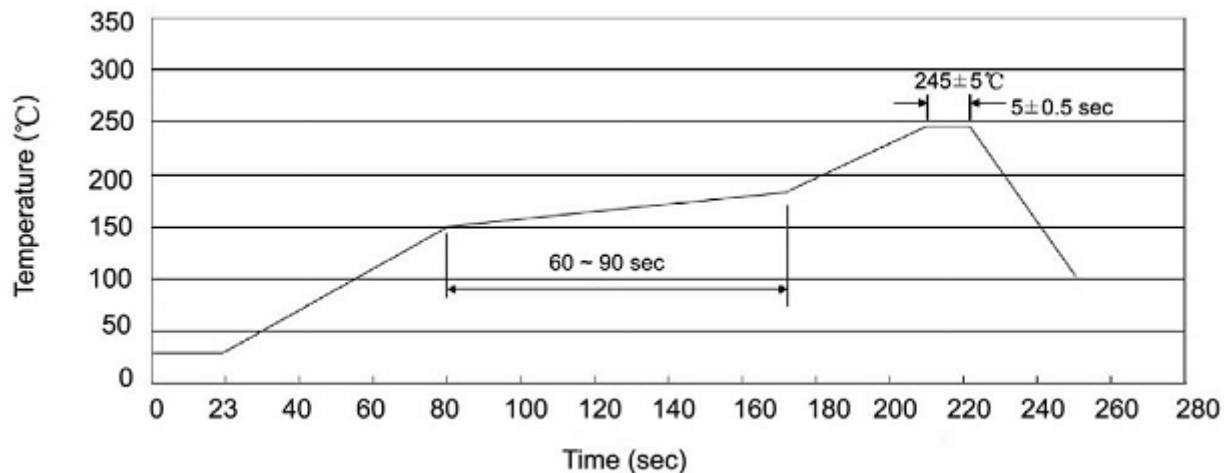


说明：

H： 为公司代码
53： 为型号代码
D： 为 h_{FE} 档次代码

Note:

H： Company Code
53： Product Type Code
D： h_{FE} Classifications Symbol Code

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)


说明：

- 1、预热温度 25~150°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 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.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C 时间：10±1 sec.

Temp.:260±5°C Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7" x8	180×120×180	390×385×205

使用说明 / Notices