

# 2SC536M/KM

Rev.F Apr.-2017

## / Descriptions

Silicon NPN transistor in a SOT-23 Plastic Package.

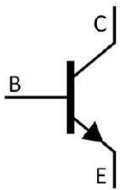
## / Features

Large current capacity and wide ASO.

## / Applications

Small signal general purpose amplifier applications.

## / Equivalent Circuit



## / Pinning



PIN1 Base    PIN 2 Emitter    PIN 3 Collector

## / $h_{FE}$ 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

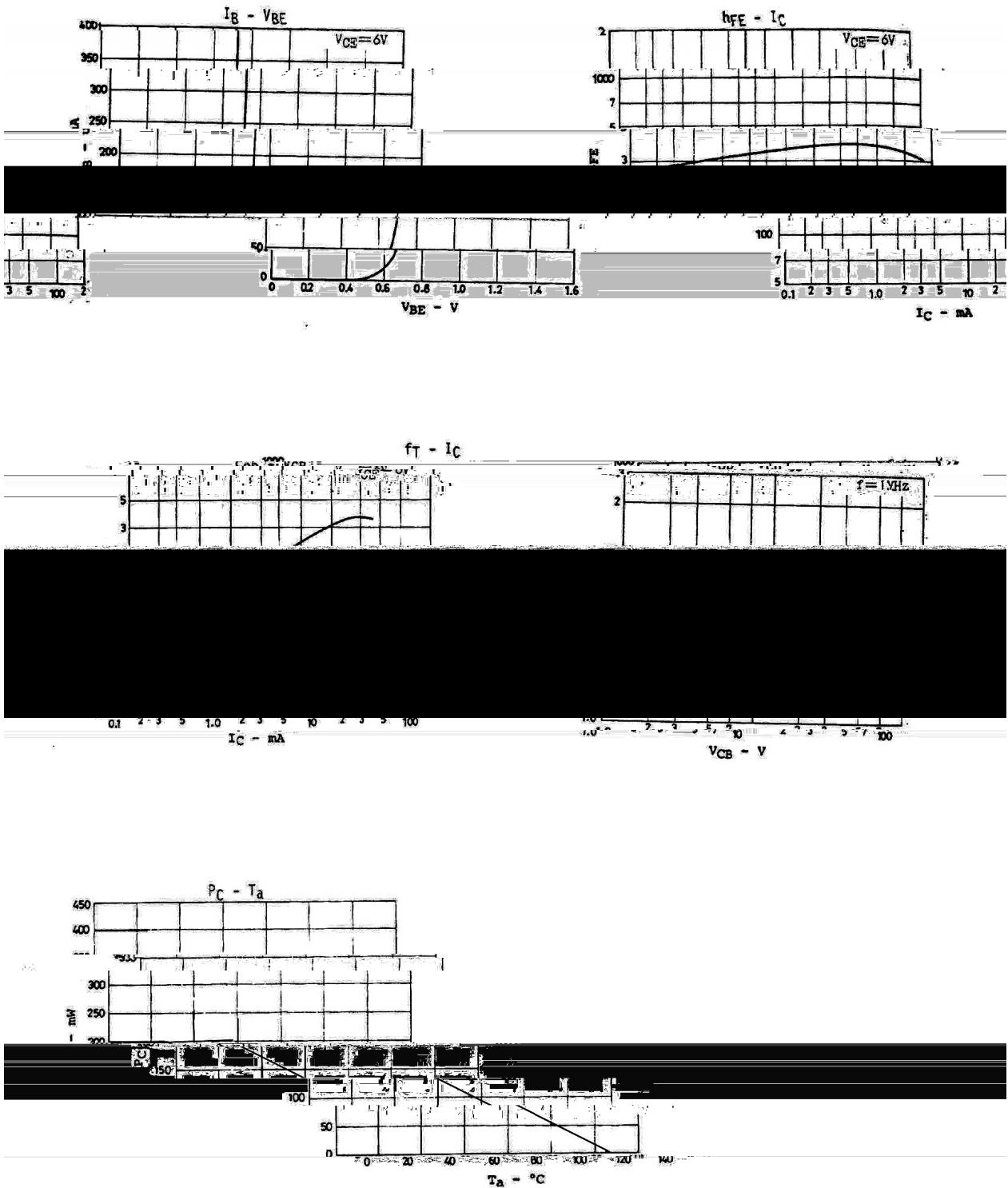
## / Absolute Maximum Ratings(Ta=25 )

Parameter		Symbol	Rating	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	
Storage Temperature Range		$T_{stg}$	-55 150	

## / Electrical Characteristics(Ta=25 )

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=35V$ $I_E=0$			1.0	A
Emitter Base Cut-Off Current	$I_{EBO}$	$V_{EB}=4.0V$ $I_C=0$			1.0	A
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

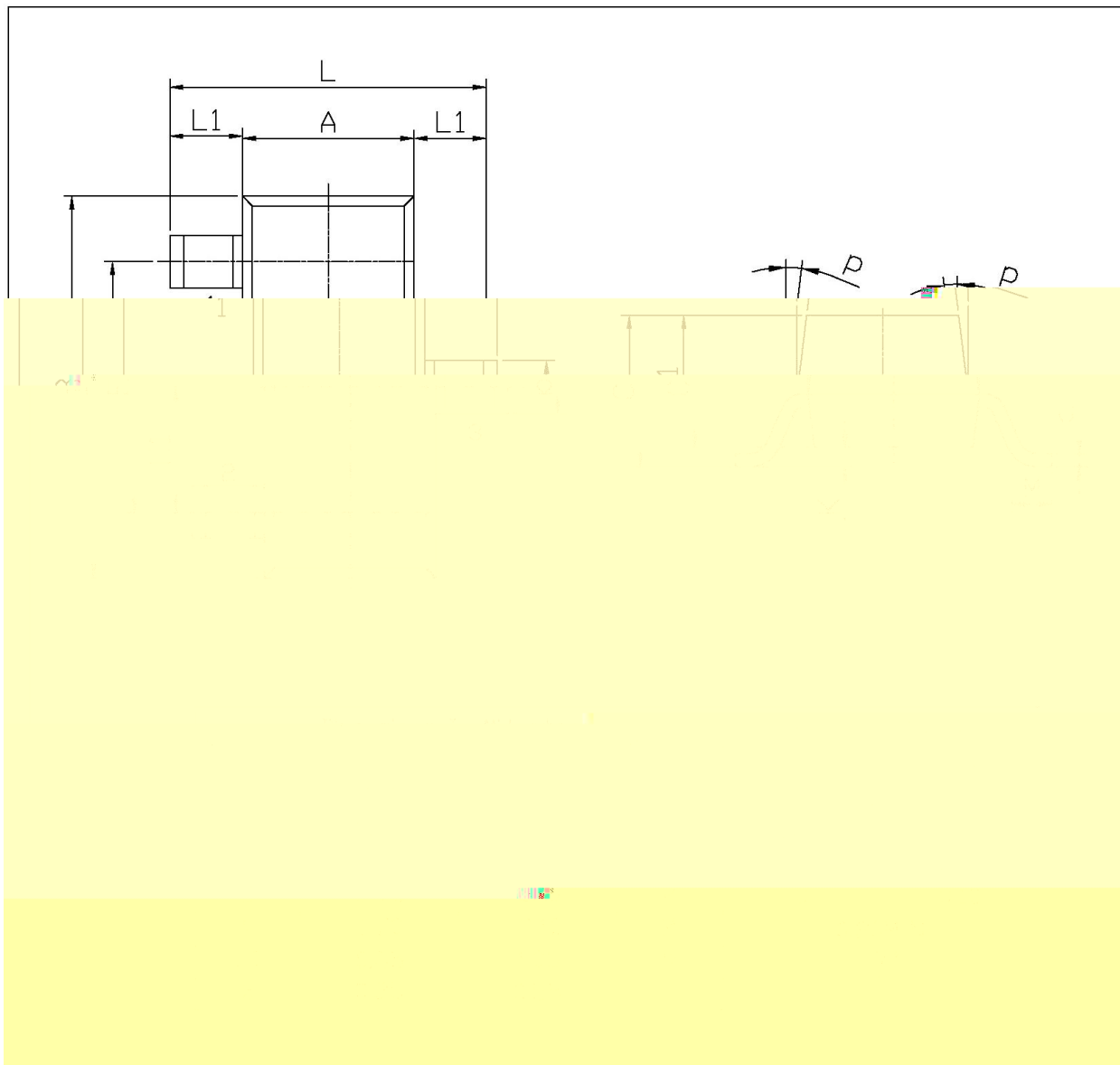
/ Electrical Characteristic Curve



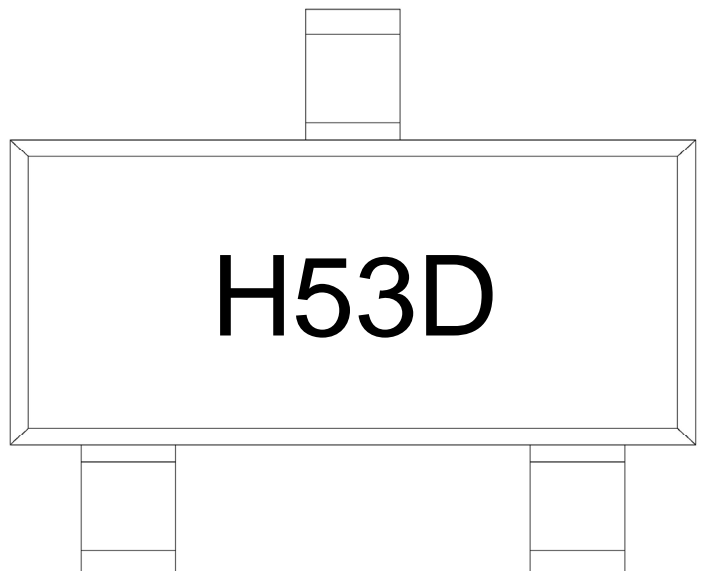
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



$h_{FE}$

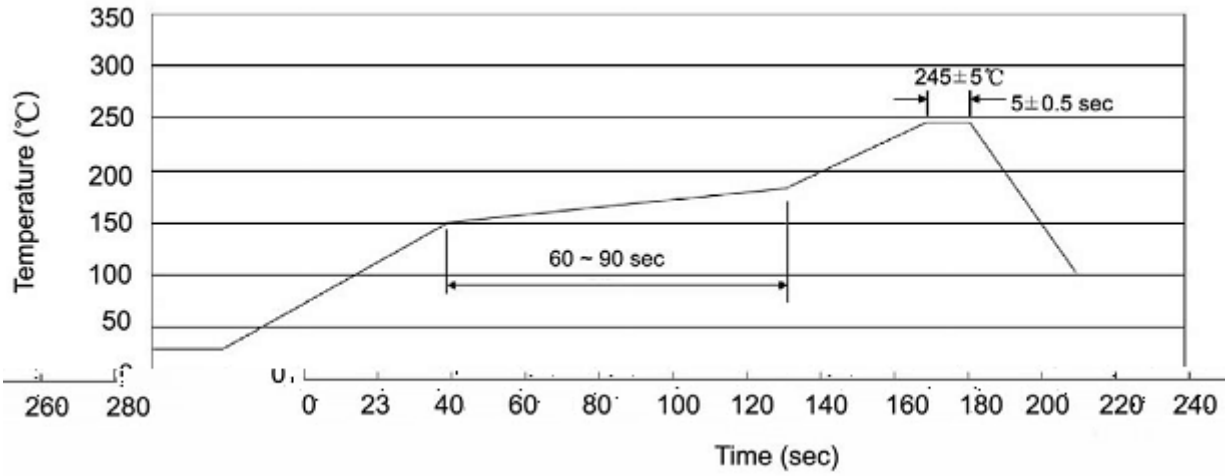
Note:

Company Code

Product Type Code

$h_{FE}$  Classifications Symbol Code

( ) /



Note:

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

/ Resistance to Soldering Heat Test Conditions

260 5                      10 1 sec.                      Temp.:260 5                      Time:10 1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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 × 8	180×120×180	390×385×205

/ Notices