

## ■ 描述 DESCRIPTIONS

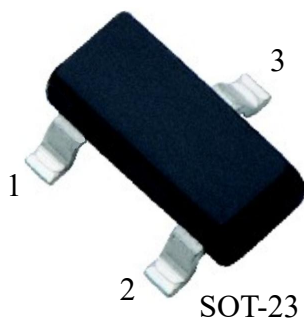
SOT-23 塑封封装 NPN 三极管。NPN transistor in SOT-23 Plastic Package.

与 FHT9012 互补。Complementary to FHT9012

## ■ 应用 APPLICATIONS

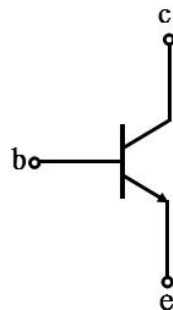
常规放大、开关电路。General purpose Amplifier、switching Application.

## ■ 引脚说明 PIN ASSIGNMENT



- 1 BASE
- 2 EMITTER
- 3 COLLECTOR

## ■ 内部等效电路 Equivalent Circuit



## ■ 型号构成 Name rule

基本名称 Name			辅助识别代码 Additional code			
第一部分 Part 1	第二部分 Part 2	第三部分 Part 3	第四部分 Part 4	第五部分 Part 5	第六部分 Part 6	第七部分 Part 7
品牌 Brand	产品类别 Type	产品型号 Model	分档 Value	分隔号 Separatrix	封装代码 Package	附加码 (备用) Extra-code
FH	T: 三极管	9013	T G	“—”	M: SOT-23	E: ROHS

**■ 额定值 ABSOLUTE MAXIMUM RATINGS (TC=25°C unless otherwise noted)**

特性参数 CHARACTERISTIC	符号 SYMBOL	额定值 RATING	单位 UNIT
集电极-基极电压 Collector-Base Voltage	$V_{CBO}$	40	V
集电极-发射极电压 Collector-Emitter Voltage	$V_{CEO}$	30	V
发射极-基极电压 Emitter-Base Voltage	$V_{EBO}$	6.0	V
集电极电流-连续 Collector Current—Continuous	$I_C$	500	mA
基极电流 Base Current	$I_B$	100	mA
集电极耗散功率 Collector Power Dissipation	$P_C$	300	mW
结温 Junction Temperature	$T_j$	150	°C
储存温度 Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C

**■ 电特性 ELECTRICAL CHARACTERISTICS**

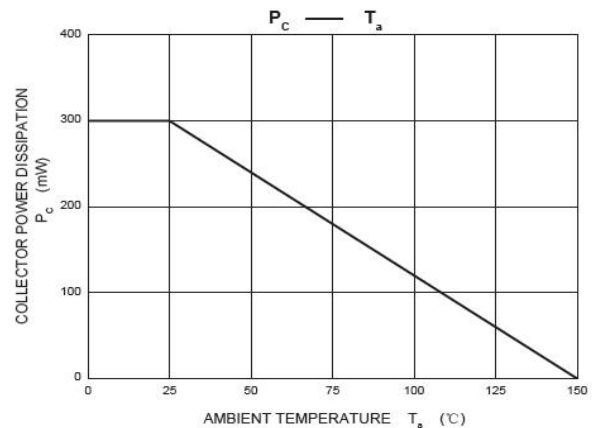
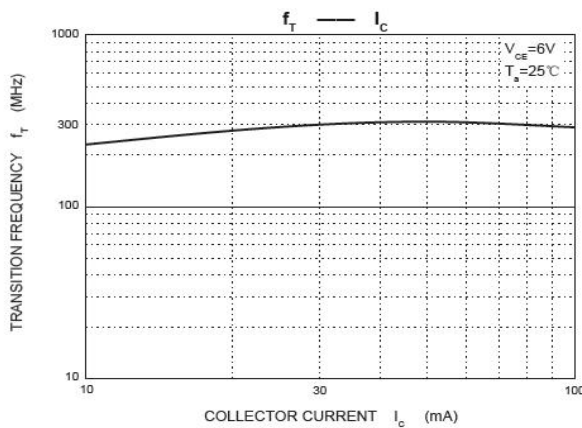
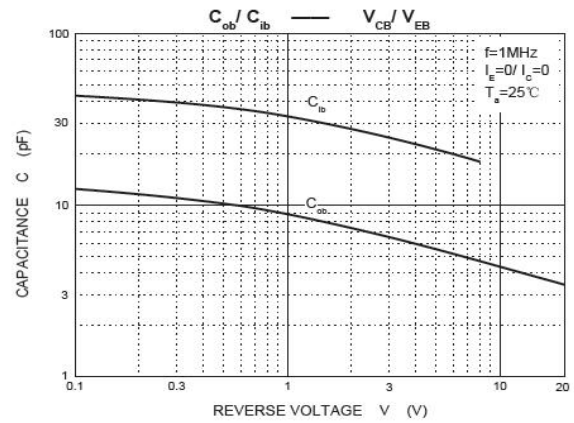
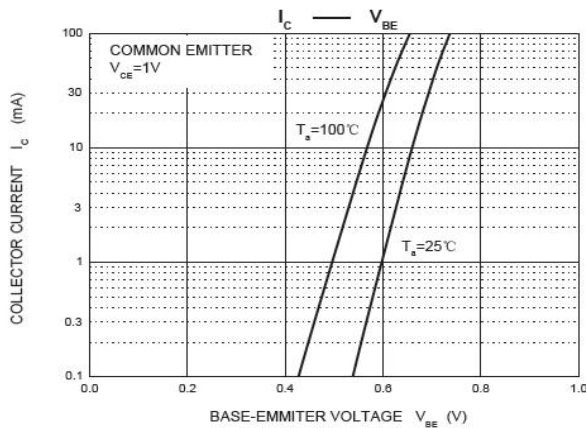
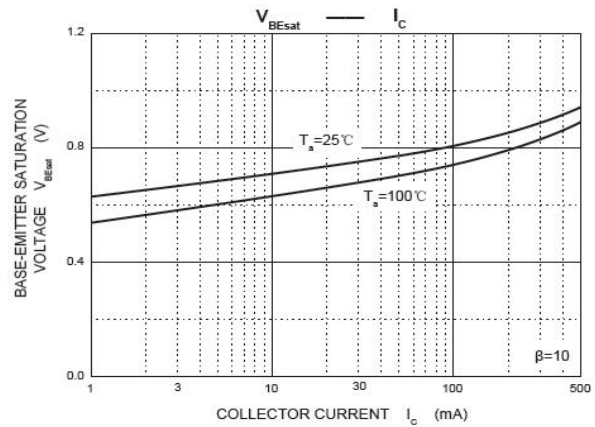
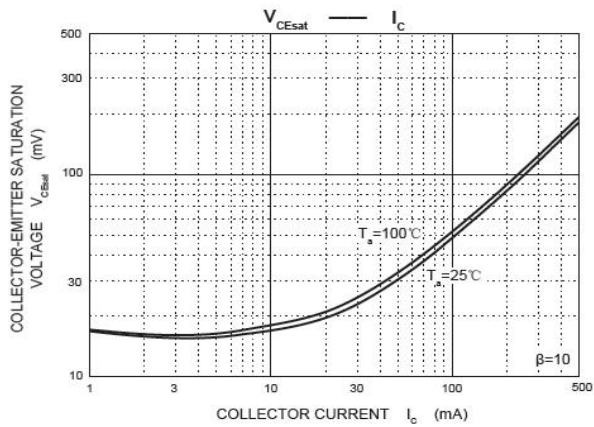
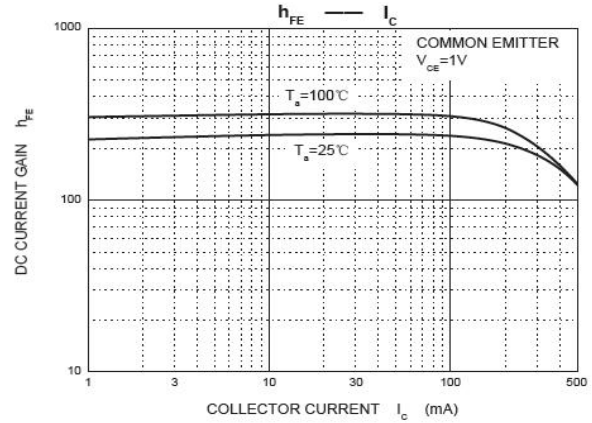
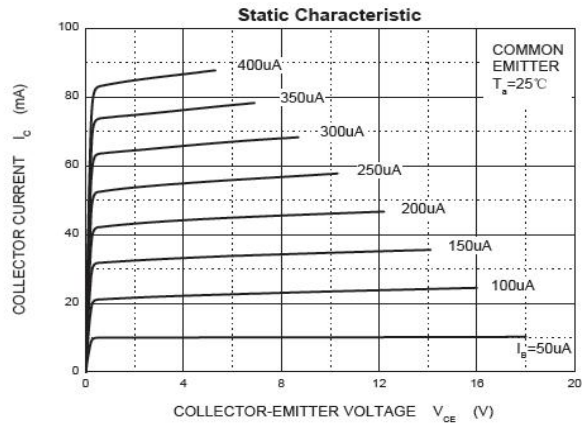
(TA=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

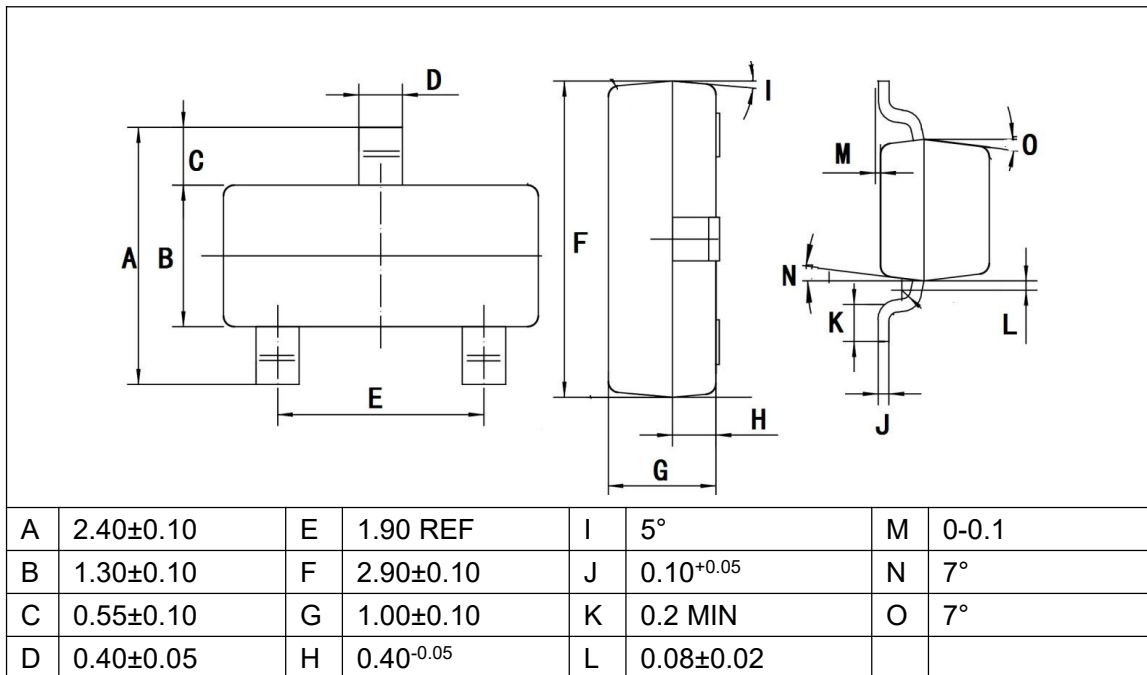
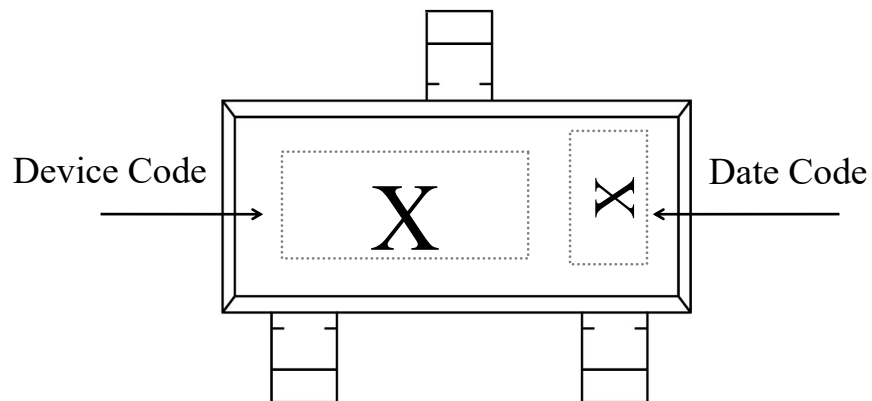
Characteristic 特性参数	Symbol 符号	Test Condition 测试条件	Min 最小值	TYP 典型	Max 最大值	Unit 单位
集电极截止电流 Collector Cutoff Current	$I_{CBO}$	$V_{CB}=35V, I_E=0$	—	—	0.1	$\mu A$
发射极-基极截止电流 Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	—	—	0.1	$\mu A$
集电极-基极击穿电压 Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A$	40	—	—	V
集电极-发射极击穿电压 Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1.0mA$	30	—	—	V
发射极-基极击穿电压 Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A$	6	—	—	V
直流电流增益 DC Current Gain	$h_{FE}(1)$	$V_{CE}=1V, I_C=50mA$	160	—	400	—
	$h_{FE}(2)$	$V_{CE}=6V, I_C=400mA$	25	—	—	—
集电极-发射极饱和压降 Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	—	—	0.6	V
集电极-发射极饱和压降 Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$	—	—	1.2	V
基极-发射极电压 Base-Emitter Voltage	$V_{BE}$	$V_{CE}=1V, I_C=100mA$	—	0.8	1.0	V
特征频率 Transition Frequency	$f_T$	$V_{CE}=-6V, I_C=-20mA$	150	300	—	MHz
输出电容 Collector Output Capacitance	$C_{ob}$	$V_{CB}=-6V, I_E=0, f=1MHz$	—	7.0	10	pF

**■ 放大倍数分档  $h_{FE}$  Classification**

Rank	T	G
$h_{FE}$ Range	160~300	200~400

■ 典型特性 TYPICAL CHARACTERISTICS



**外形尺寸 DIMENSION**

**打标 DEVICE MARKING**


TYPE	FHT9013T-ME	FHT9013G-ME
Rank	T	G
MARK	6T	6G

**■ 包装信息 PACKAGE INFORMATION**

材料名称 Material Name	颜色 Color	尺寸 Size	数量 Quantity	备注 Note
卷盘 Reel	蓝色 Blue	7 " *8mm	3K/Reel	
内盒 Inner Case	黄色 Yellow	185*185*140mm	30K/盒 (10 盘/盒) 30K/Case (10 Reel/ Case)	OHO2
外箱 Outer Box	黄色 Yellow	460*400*210mm	180K/箱 (6 盒/箱) 180K/Box (6 Case/Box)	OXO2
标签 Label	白色 White	68*40mm	—	贴卷盘、内盒、外箱 Label on reel、inner case、 outer box