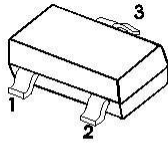


SOT-23**SOT-23贴片塑封三极管****SOT-23 Plastic-Encapsulate Transistors**

1. BASE
2. EMITTER
3. COLLECTOR

Marking: CR

特征 Features

- 放大线性好; Excellent hFE Linearity
- 最大功率耗散 200mW; Power Dissipation of 200mW
- 高稳定性和可靠性; High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 环氧树脂UL 易燃等级Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25°C 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
集-基击穿电压 Collector-Base Voltage	V _{CBO}	60	V
集-射击穿电压 Collector-Emitter Voltage	V _{CEO}	50	V
射-基击穿电压 Emitter -Base Voltage	V _{EBO}	5	V
集电极连续电流 Collector Current-Continuous	I _C	150	mA
功耗 Collector Power Dissipation	P _C	200	mW
结温 Junction Temperature	T _j	150	°C
储存温度 Storage Temperature	T _{stg}	-55-+150	°C
结环热阻 Thermal resistance From junction to ambient	R _{θJA}	625	°C/W

电特性 (TA = 25°C 除非另有规定)

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

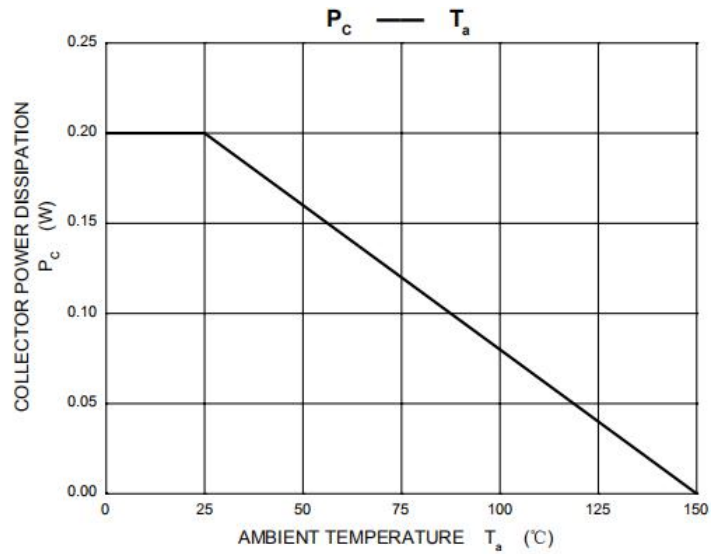
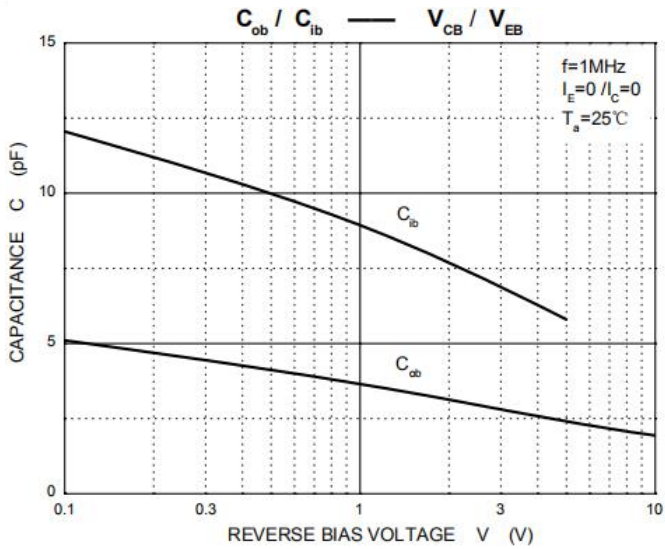
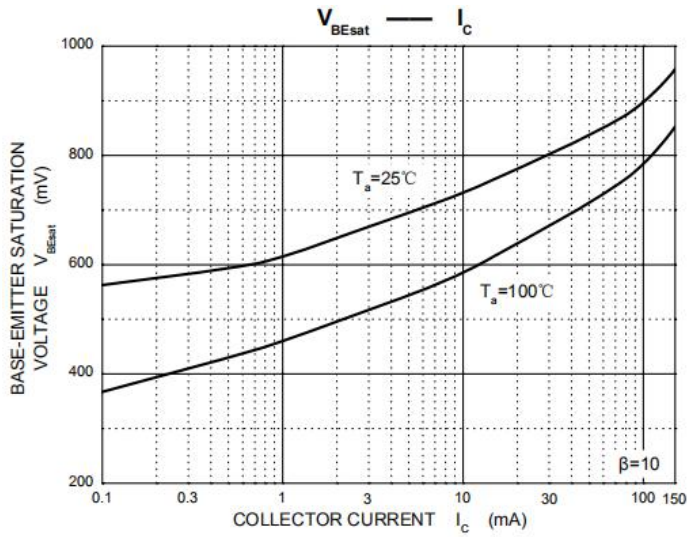
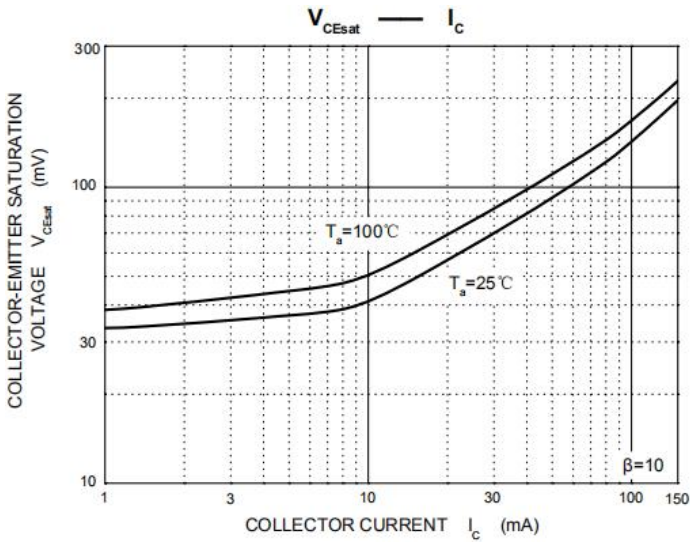
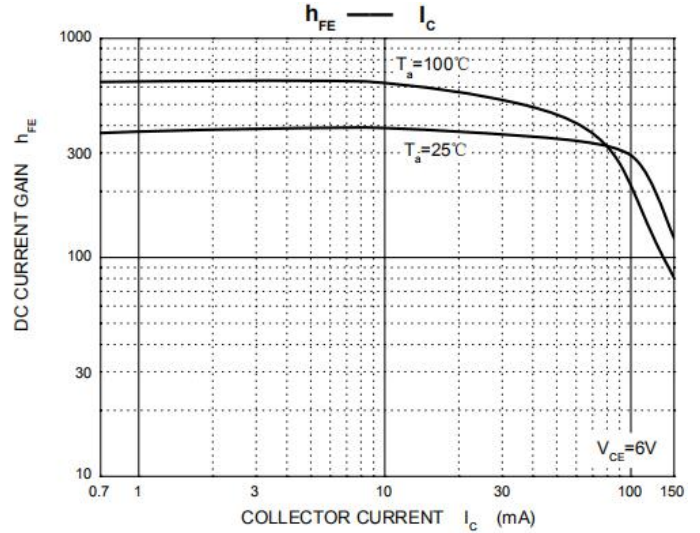
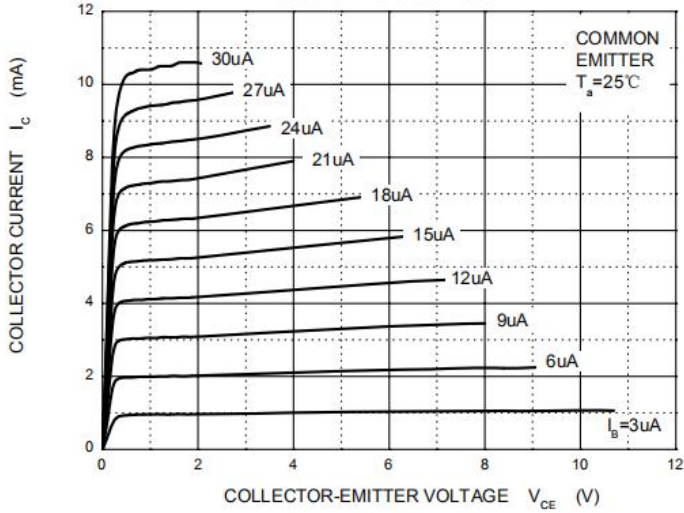
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
集-基击穿电压 Collector-base breakdown voltage	V(BR)CBO	I _C =100μA, I _E =0	60		V
集-射击穿电压 Collector-emitter breakdown voltage	V(BR)CEO	I _C =1mA, I _B =0	50		V
射-基击穿电压 Emitter-base breakdown voltage	V(BR)EBO	I _E =0.1mA, I _C =0	5		V
集电极截止电流 Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0		100	nA
发射极截止电流 Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0		100	nA
集电极截止电流 Collector cut-off current	I _{CER}	V _{CE} =55V, R=10MΩ		100	nA
直流增益 DC current gain	hFE(1)	V _{CE} =6V, I _C =1mA	130	400	
	hFE(2)	V _{CE} =6V, I _C =0.1mA	40		
集-射饱和电压 Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =10mA		0.3	V
基-射饱和电压 Base-emitter saturation voltage	V _{BE(sat)}	I _C =100mA, I _B =10mA		1	V
特征频率 Transition frequency	f _T	V _{CE} =6V, I _C =10mA, f=30MHz	150		MHz
集电极输出电容 Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		3	pF
噪声因数 Noise figure	NF	V _{CE} =6V, I _C =0.1mA, R _g =10kΩ, f=1kHz		10	dB

放大倍数分档 CLASSIFICATION OF H_{FE}(1)

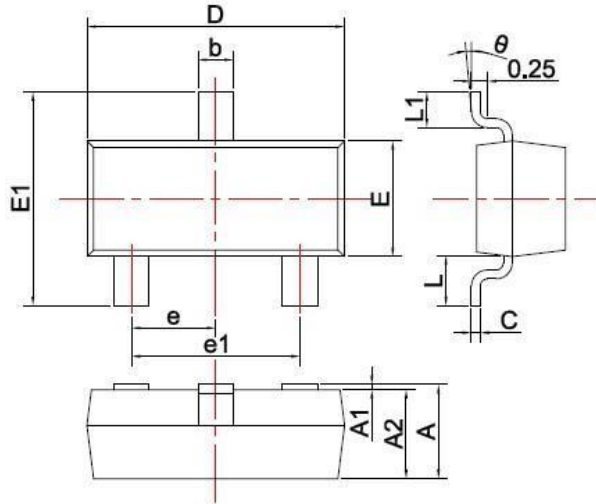
HFE	130-400	
RANK	L	H
RANGE	130-200	200-400

典型特性 Typical Characteristics

Static Characteristic



SOT-23 PACKAGE OUTLINE Plastic surface mounted package

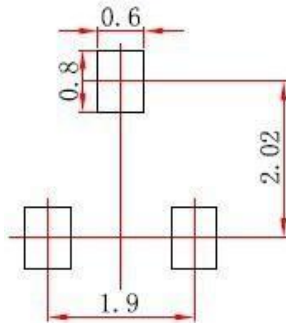


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
H	0°	8°

Unit: mm

焊盘设计参考 **Precautions:** PCB Design

Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs



Note:

1. Controlling dimension: In millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.