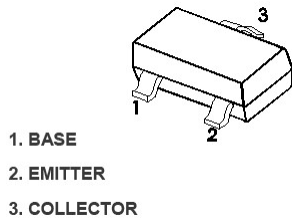


SOT-23**Marking: 3D**
SOT-23 贴片塑封三极管
SOT-23 Plastic-Encapsulate Transistors
特征 Features

- 与 MMBTA94 配对; Complementary to MMBTA94
- 最大功率耗散 350mW; Power Dissipation of 350mW
- 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
Collector-Base Voltage	V _{CBO}	400	V
Collector-Emitter Voltage	V _{CEO}	400	V
Emitter -Base Voltage	V _{EBO}	6	V
Collector Current-Continuous	I _C	200	mA
Collector Power Dissipation	P _C	350	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}	357	°C/W

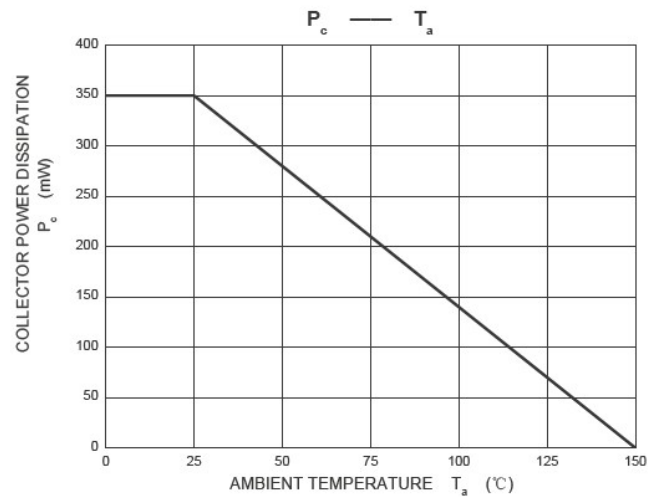
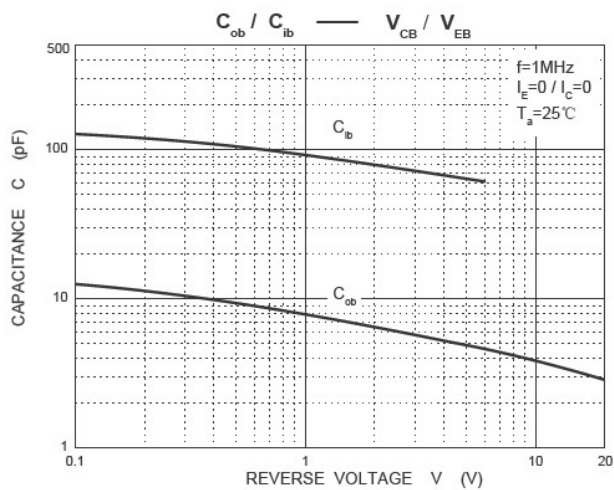
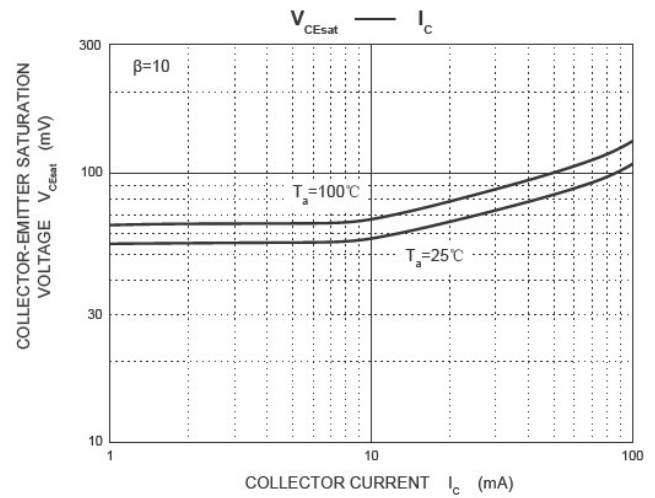
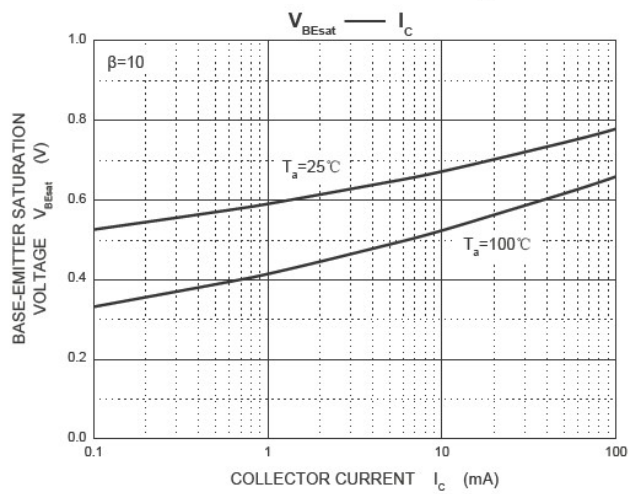
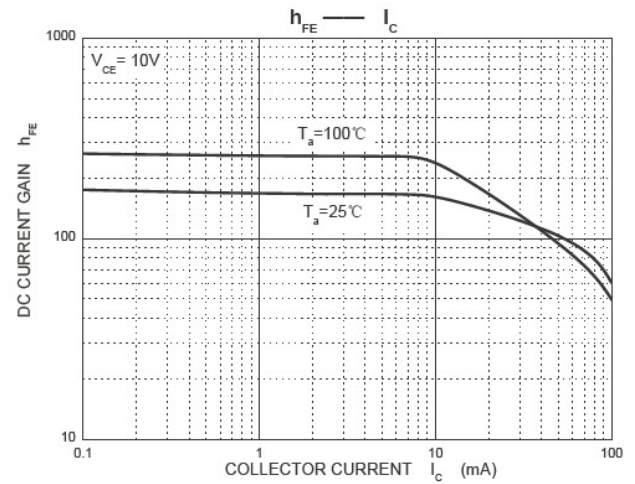
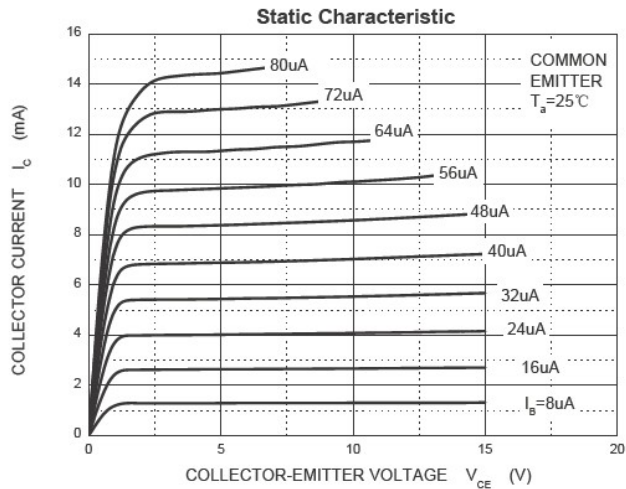
电特性 (TA = 25°C 除非另有规定)

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

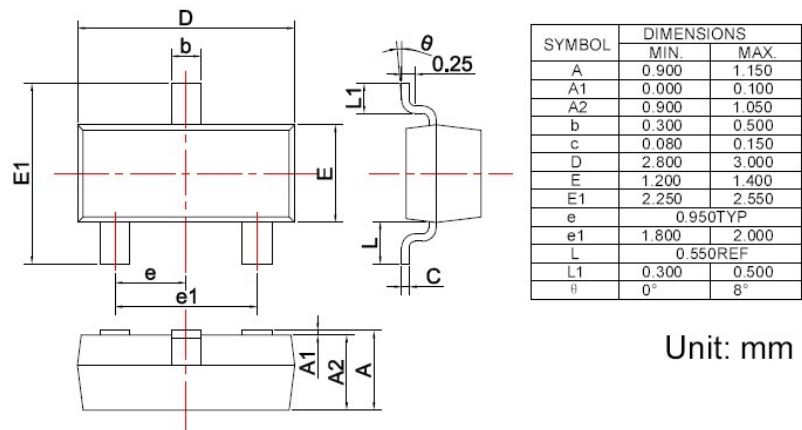
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
Collector-base breakdown voltage	V(BR)CBO	I _C =100uA, I _E =0	400		V
Collector-emitter breakdown voltage	V(BR)CEO	I _C =1mA, I _B =0	400		V
Emitter-base breakdown voltage	V(BR)EBO	I _E =10uA, I _C =0	6		V
Collector cut-off current	I _{CBO}	V _{CB} =400V, I _E =0		100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0		100	nA
DC current gain	hFE(1)*	V _{CE} =10V, I _C =1mA	40		
	hFE(2)*	V _{CE} =10V, I _C =10mA	50		200
	hFE(3)*	V _{CE} =10V, I _C =50mA	45		
	hFE(4)*	V _{CE} =10V, I _C =100mA	40		
Collector-emitter saturation voltage	VCE(sat)1*	I _C =1mA, I _B =0.1mA		0.40	V
Collector-emitter saturation voltage	VCE(sat)2*	I _C =10mA, I _B =1mA		0.50	V
Collector-emitter saturation voltage	VCE(sat)3*	I _C =50mA, I _B =5mA		0.75	V
Base -emitter saturation voltage	VBE(sat)*	I _C =10mA, I _B =1mA		0.75	V
Collector output capacitance	C _{ob}	V _{CB} =20V, I _E =0; f=1MHz		7	pF
Emitter input capacitance	C _{ib}	V _{EB} =0.5V, I _C =0; f=1MHz		130	pF

*Pulse test: pulse width ≤ 300us, duty cycle ≤ 2.0%.

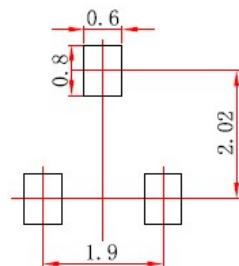
Typical characteristics



SOT-23 PACKAGE OUTLINE Plastic surface mounted package



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.