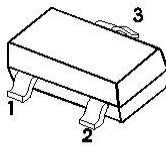


SOT-23

贴片塑封三极管

SOT-23 Plastic-Encapsulate Transistors



1. BASE
2. EMITTER
3. COLLECTOR

Marking:493

特征 Features

与 FMMT593 配对; Complementary to FMMT593
最大功率耗散 250mW; Power Dissipation of 250mW
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}	120	V
Collector-Emitter Voltage	V _{CEO}	100	V
Emitter -Base Voltage	V _{EBO}	5	V
Collector Current-Continuous	I _C	1000	mA
Collector Power Dissipation	P _C	250	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}	500	°C/W

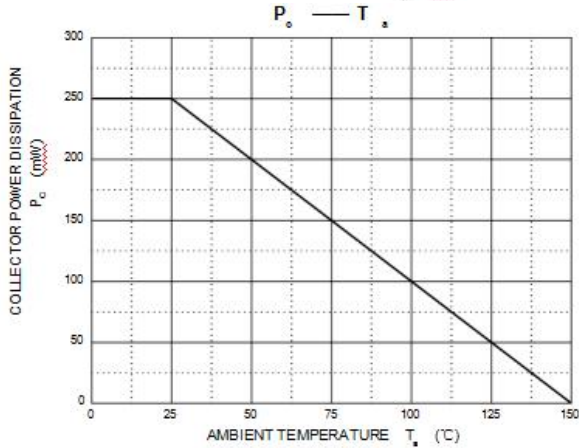
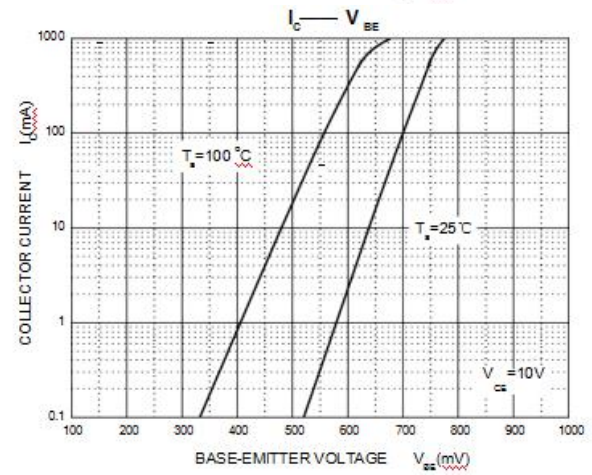
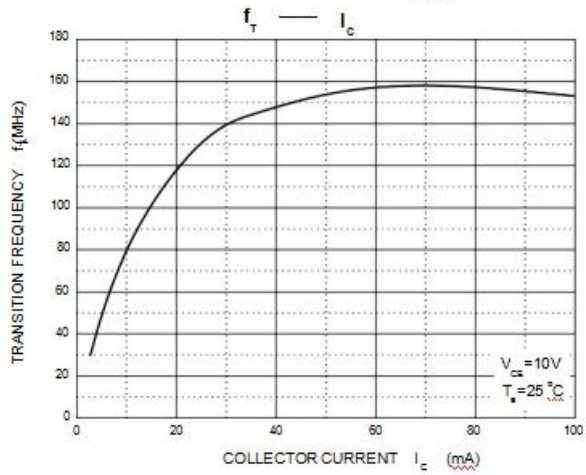
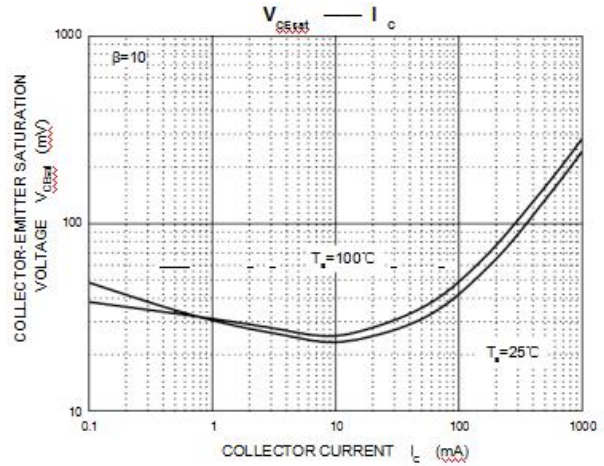
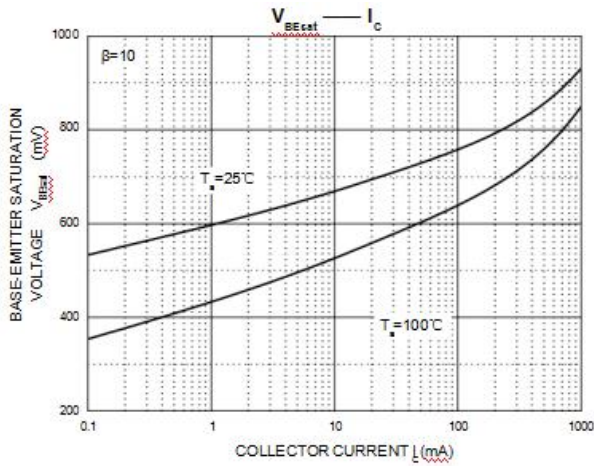
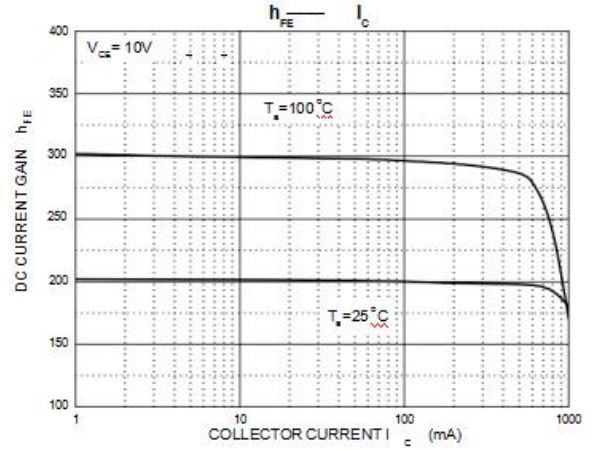
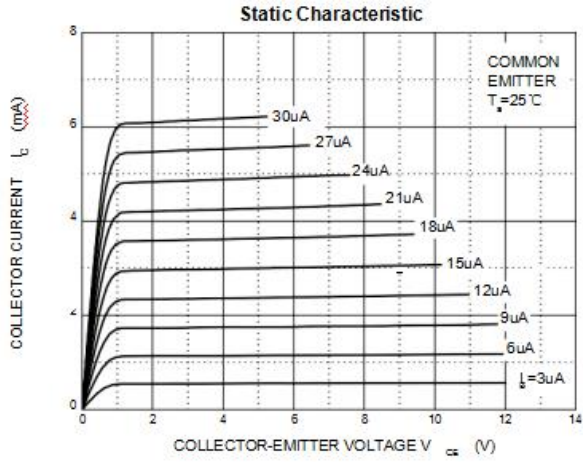
电特性 (TA = 25°C 除非另有规定)

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

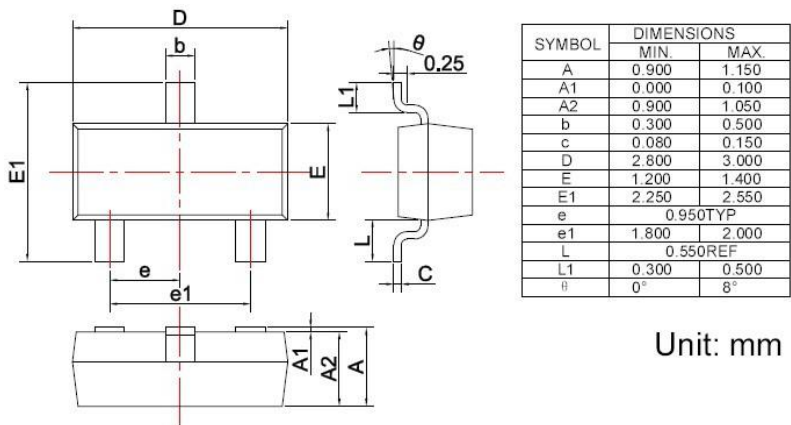
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
Collector-base breakdown voltage	V(BR)CBO	IC=100uA, IE=0	120		V
Collector-emitter breakdown voltage	V(BR)CEO	IC=10mA, IB=0	100		V
Emitter-base breakdown voltage	V(BR)EBO	IE=100uA, IC=0	5		V
Collector cut-off current	ICES	VCE=100V, IE=0		50	nA
Collector cut-off current	ICBO	VCB=100V, IE=0		100	nA
Emitter cut-off current	IEBO	VEB=4V, IC=0		100	nA
DC current gain	hFE(1)*	VCE=10V, IC=1mA	100		
	hFE(2)*	VCE=10V, IC=250mA	100	300	
	hFE(3)*	VCE=10V, IC=0.5A	60		
	hFE(4)*	VCE=10V, IC=1A	20		
Collector-emitter saturation voltage	VCE(sat)1*	IC=500mA, IB=50mA		0.30	V
	VCE(sat)2*	IC=1A, IB=100mA		0.60	V
Base -emitter saturation voltage	VBE(sat)*	IC=1A, IB=100mA		1.15	V
Base-emitter voltage	VBE*	VCE=10V, IC=1A		1	V
Transition frequency	f _T	VCE=10V, IC=50mA, f=100MHz	150		
Collector output capacitance	C _{ob}	VCB=10V, IE=0, f=1MHz		10	pF

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

典型特性曲线 Typical characteristics

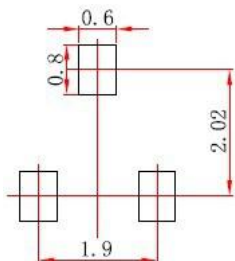


SOT-23 PACKAGE OUTLINE Plastic surface mounted package



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.