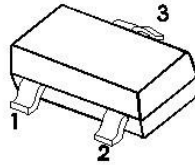


SOT-23



1. BASE

2. EMITTER

3. COLLECTOR

MARKING:2A

特征 Features

- 与MMBT3904配对;Complementary to MMBT3904
- 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
- Device meets MSL 1 requirements

极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (TA=25℃ unless otherwise specified)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
Collector-Base Voltage	VCBO	-40	V
Collector-Emitter Voltage	VCEO	-40	V
Emitter -Base Voltage	VEBO	-5	V
Collector Current-Continuous	IC	-200	mA
Collector Power Dissipation	PC	200	mW
Junction Temperature	Tj	150	℃
Storage Temperature	TSTG	-55-+150	℃
Thermal resistance from junction to ambient	RθJA	625	℃/W

电特性 Electrical Characteristics (TA=25℃ unless otherwise specified)

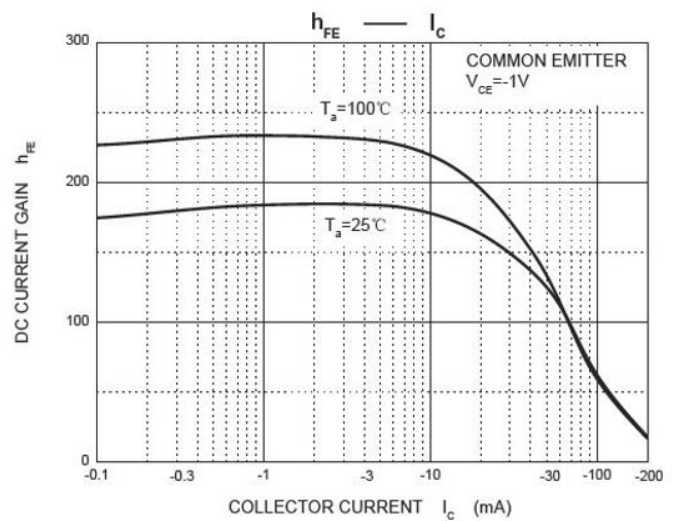
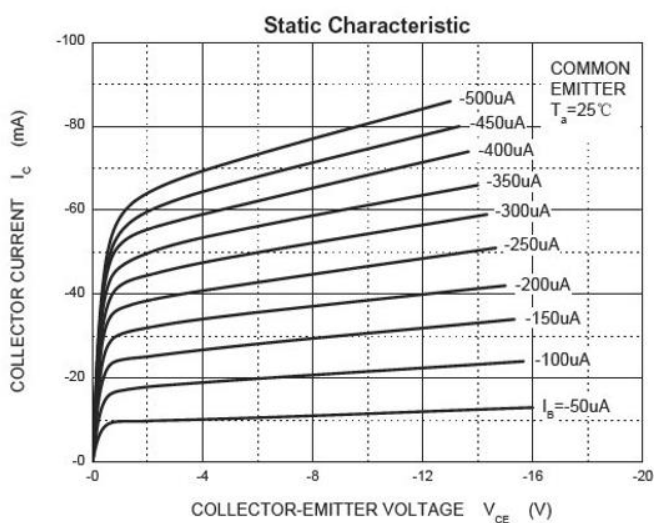
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
Collector-base breakdown voltage	V(BR)CBO	IC=-10uA, IE=0	-40		V
Collector-emitter breakdown voltage	V(BR)CEO	IC=-1mA, IB=0	-40		V
Emitter-base breakdown voltage	V(BR)EBO	IE=-10uA, IC=0	-5		V
Collector cut-off current	ICEX	VCE=-30V, VBE(off)=-5V		-100	nA
Collector cut-off current	ICBO	VCB=-40V, IE=0		-50	nA
Emitter cut-off current	IEBO	VEB=-5V, IC=0		-100	nA

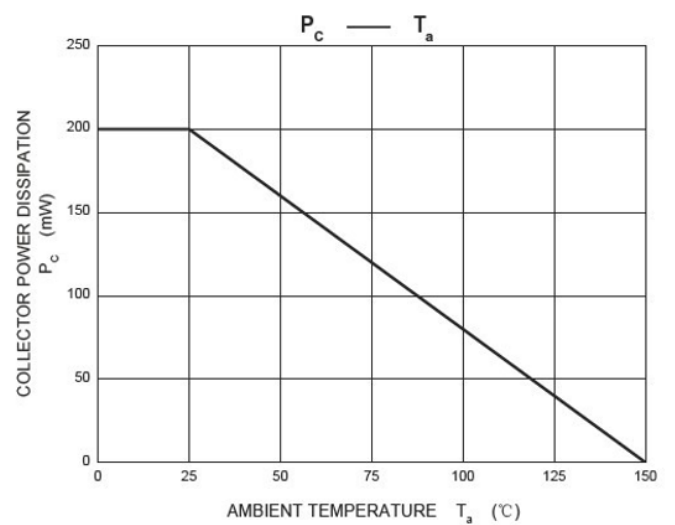
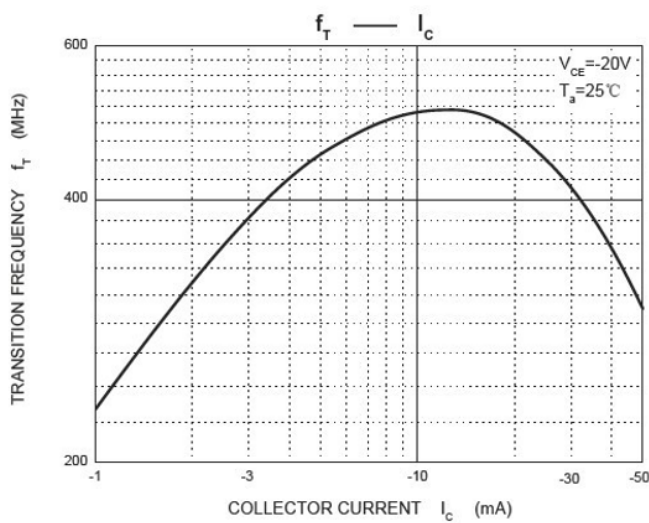
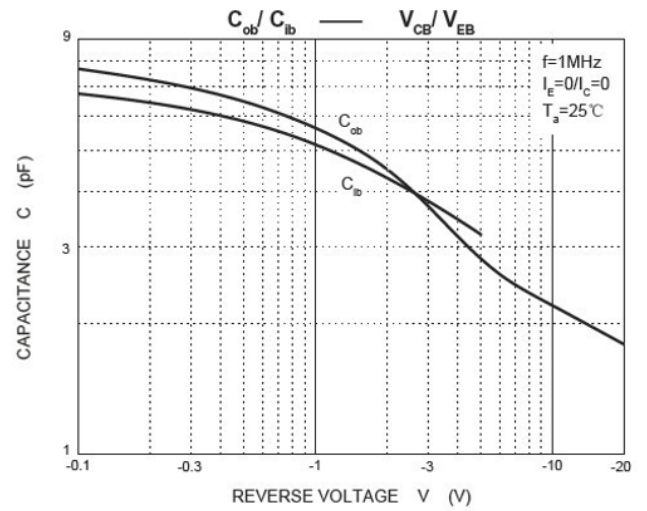
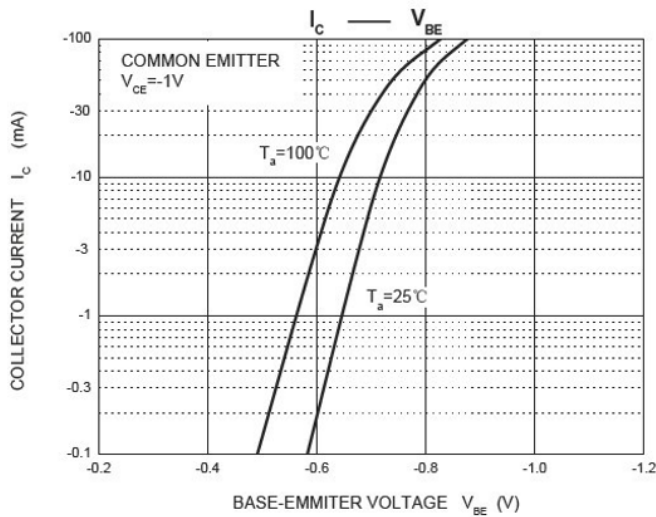
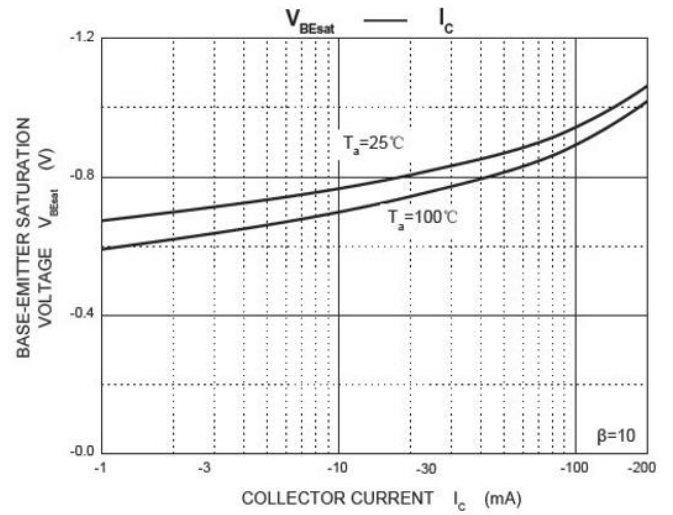
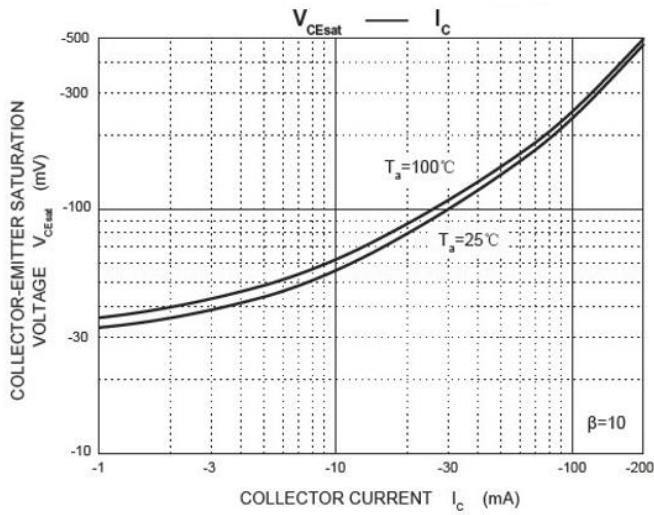
DC current gain	hFE(1)	VCE=-1V, IC=-10mA	100	300	
	hFE(2)	VCE=-1V, IC=-50mA	60		
	hFE(3)	VCE=-1V, IC=-100mA	30		
Collector-emitter saturation voltage	VCE(sat)1	IC=-50mA, IB=-5mA		-0.3	V
Base -emitter saturation voltage	VBE(sat)	IC=-50mA, IB=-5mA		-0.95	V
Transition frequency	fT	VCE=-20V, IC=-10mA, f=100MHz	300		MHz
Delay time	td	VCC=-3V, VBE(off)=-0.5V IC=-10mA, IB1=-1mA		35	nS
Rise time	tr			35	nS
Storage time	ts	VCC=-3V, IC=-10mA, IB1=IB2=-1mA		225	nS
Fall time	tf			75	nS

CLASSIFICATION OF hFE(1)

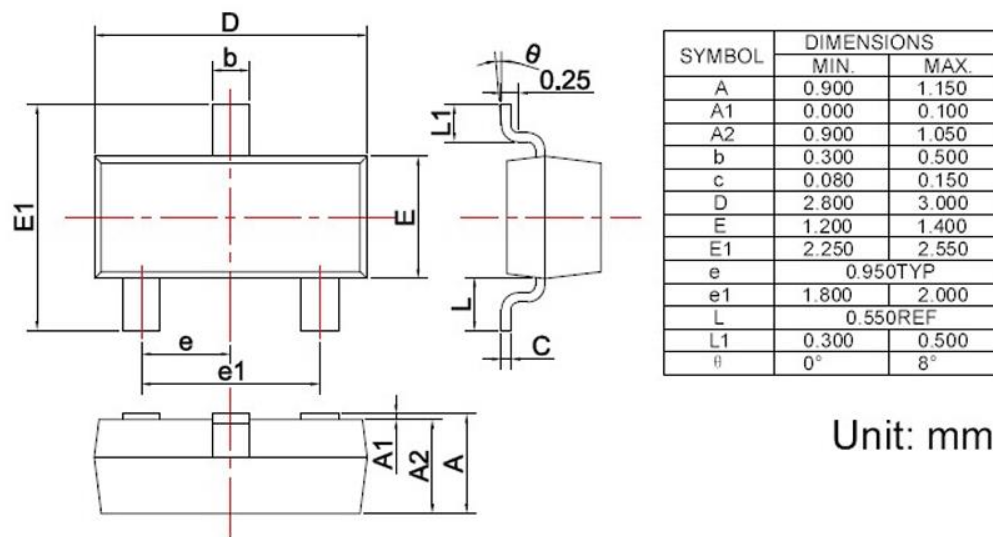
HFE	100-300	
RANK	L	H
RANGE	100-200	200-300

Typical Performance Characteristics (TA=25°C unless otherwise Specified)

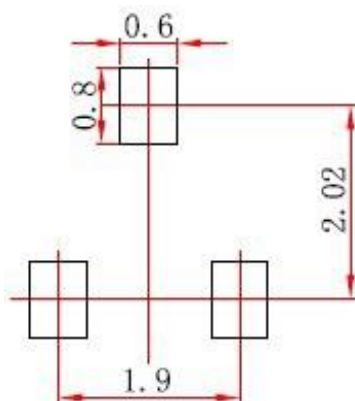




SOT-23 Package Outline Drawing



Suggested Land Pattern



Note:

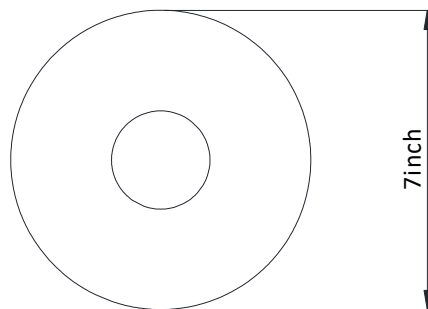
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Ordering Information

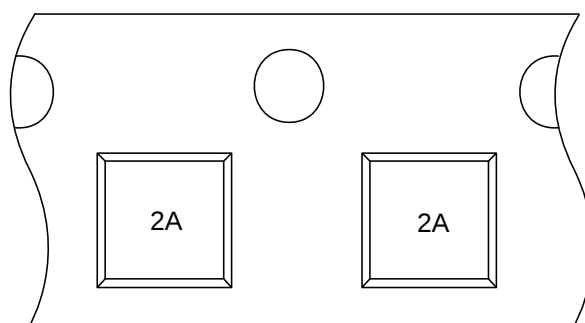
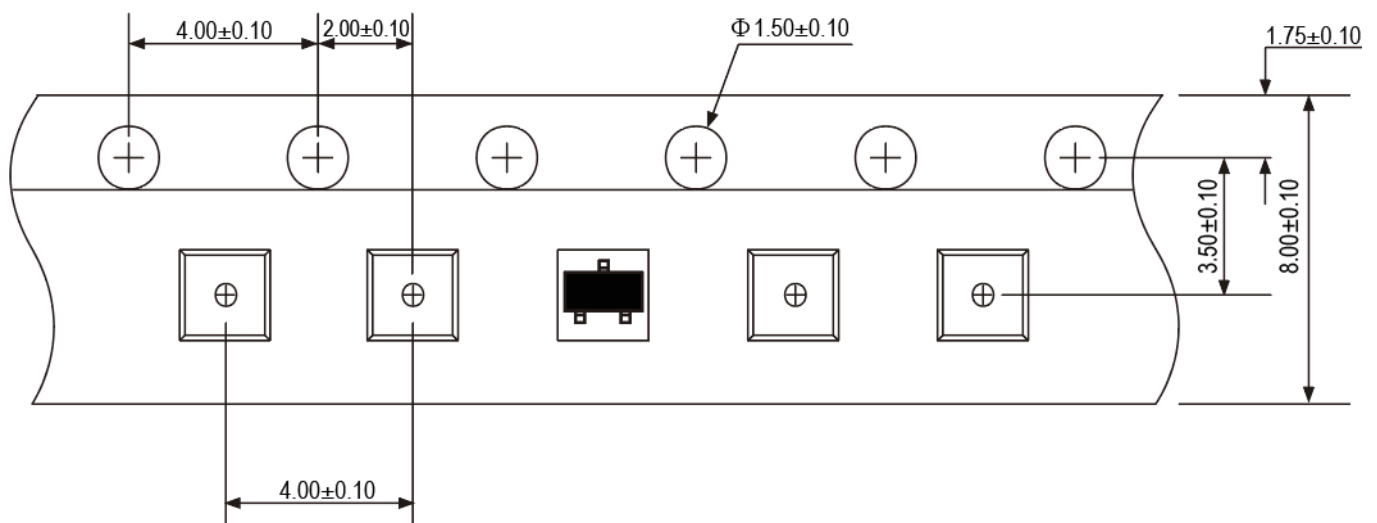
Part Number	Shipping	Reel Size
MMBT3906	3000/Tape & Reel	7 inch

Tape and Reel Information

Reel Dimensions



Tape Dimensions



User Direction of Feed

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