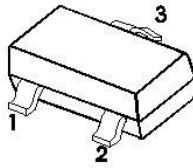


SOT-23



1. BASE

2. EMITTER

3. COLLECTOR

MARKING:2T

特征 Features

- 最大功率耗散 300mW; Power Dissipation of 300mW
- 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)

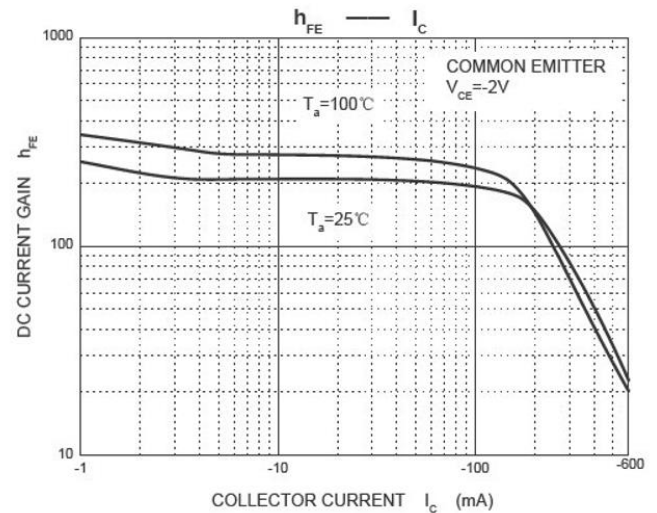
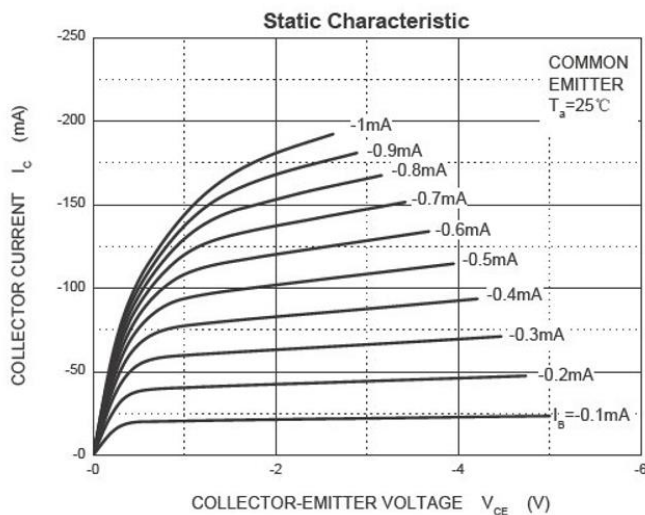
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
Collector-Base Voltage	VCBO	-40	V
Collector-Emitter Voltage	VCEO	-40	V
Emitter -Base Voltage	VEBO	-5	V
Collector Current-Continuous	IC	-600	mA
Collector Power Dissipation	PC	300	mW
Junction Temperature	Tj	150	℃
Storage Temperature	TSTG	-55-+150	℃
Thermal resistance from junction to ambient	RθJA	417	℃/W

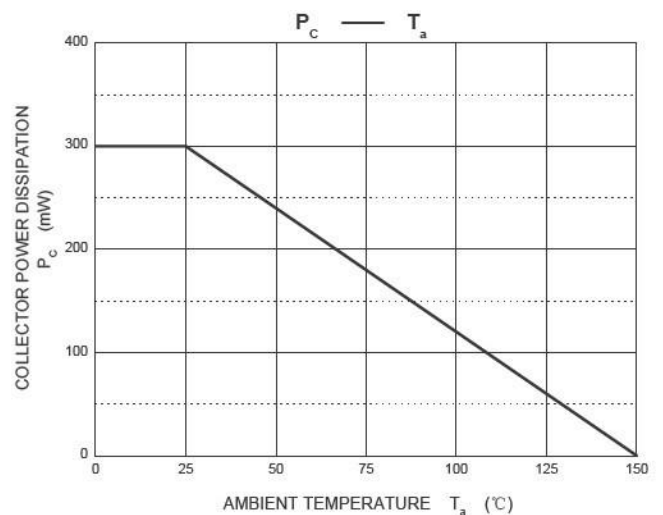
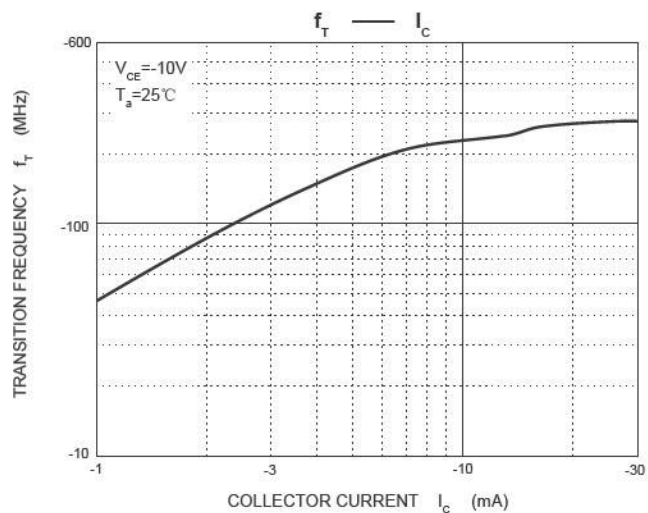
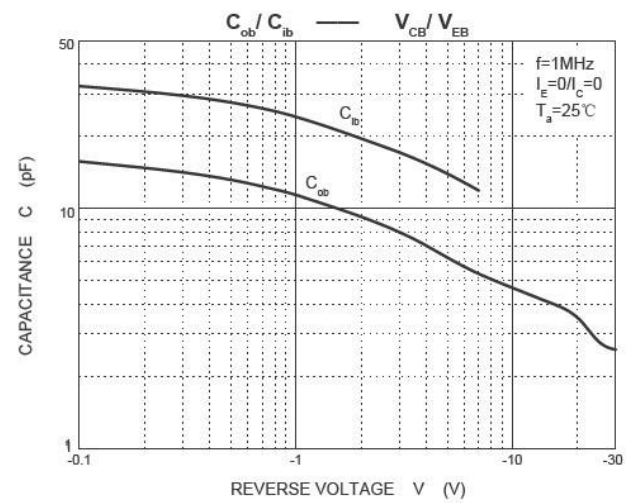
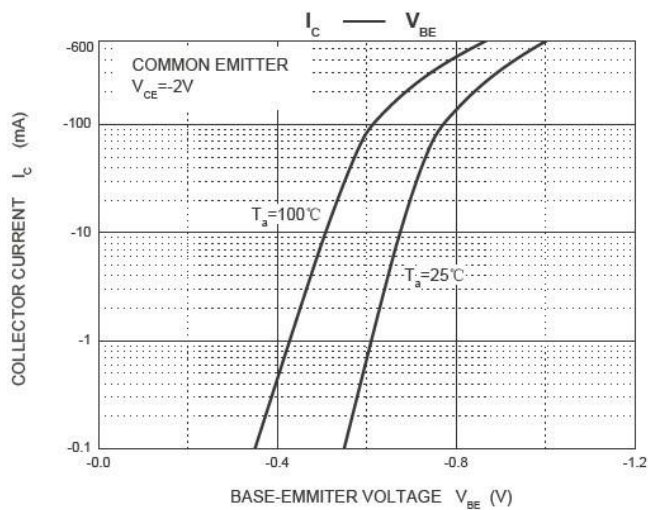
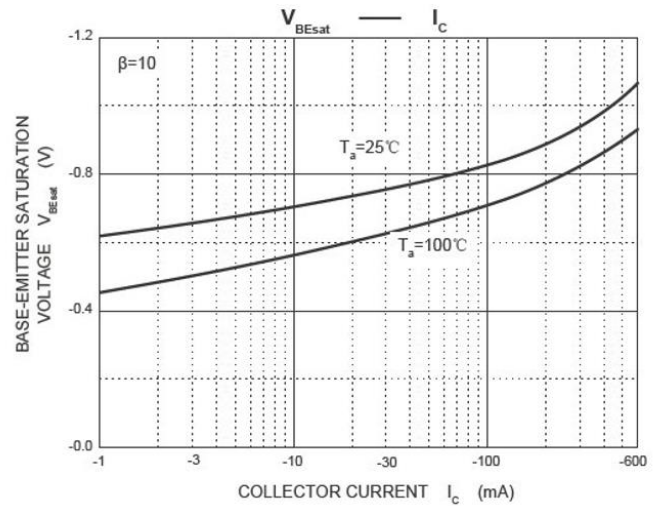
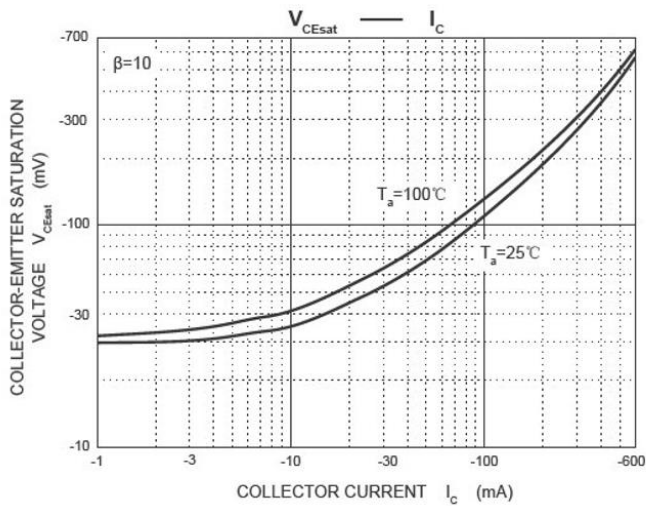
电特性 Electrical Characteristics (TA=25℃ unless otherwise specified)

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=-100uA, 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=-100uA, IC=0	-5		V
Collector cut-off current	ICBO	VCB=-35V, IE=0		-100	nA
Collector cut-off current	ICEX	VCE=-35V, VBE(off)=-0.4V		-100	nA
Emitter cut-off current	IEBO	VEB=-4V, IC=0		-100	nA

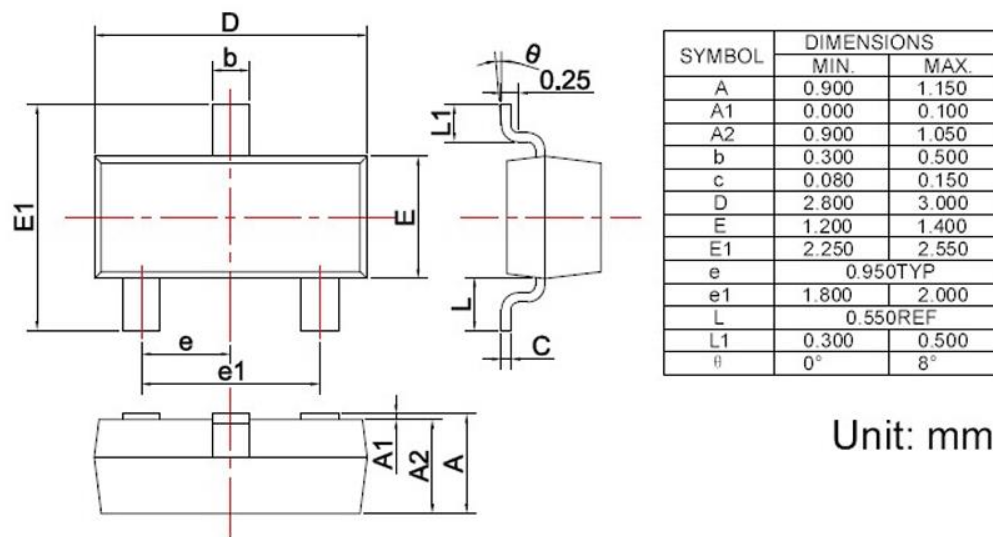
DC current gain	hFE(1)	VCE=-1V, IC=-0.1mA	30		
	hFE(2)	VCE=-1V, IC=-1mA	60		
	hFE(3)	VCE=-1V, IC=-10mA	100		
	hFE(4)	VCE=-2V, IC=-150mA	100	300	
	hFE(5)	VCE=-2V, IC=-500mA	20		
Collector-emitter saturation voltage	VCE(sat)	IC=-150mA, IB=-15mA		-0.40	V
		IC=-500mA, IB=-50mA		-0.75	V
Base -emitter saturation voltage	VBE(sat)	IC=-150mA, IB=-15mA		-0.95	V
		IC=-500mA, IB=-50mA		-1.30	V
Transition frequency	fT	VCE=-10V, IC=-20mA, f=100MHz	200		MHz
Delay time	td	VCC=-30V, VBE(off)=-0.5V IC=-150mA, IB1=-15mA		15	nS
Rise time	tr			20	nS
Storage time	ts	VCC=-30V, IC=-150mA, IB1=IB2=-15mA		225	nS
Fall time	tf			60	nS

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

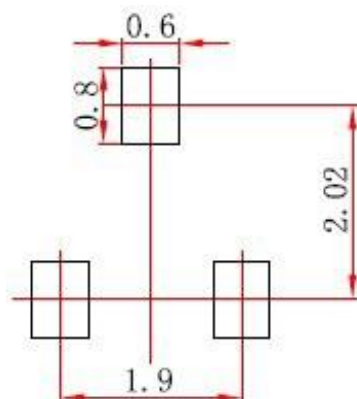




SOT-23 Package Outline Drawing



Suggested Land Pattern



Note:

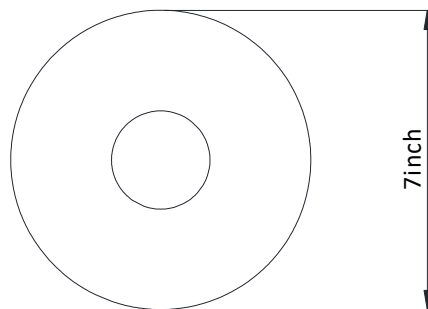
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Ordering Information

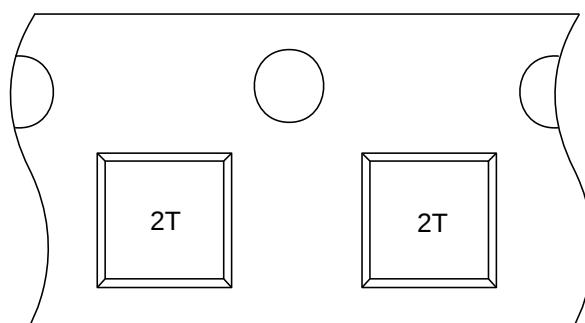
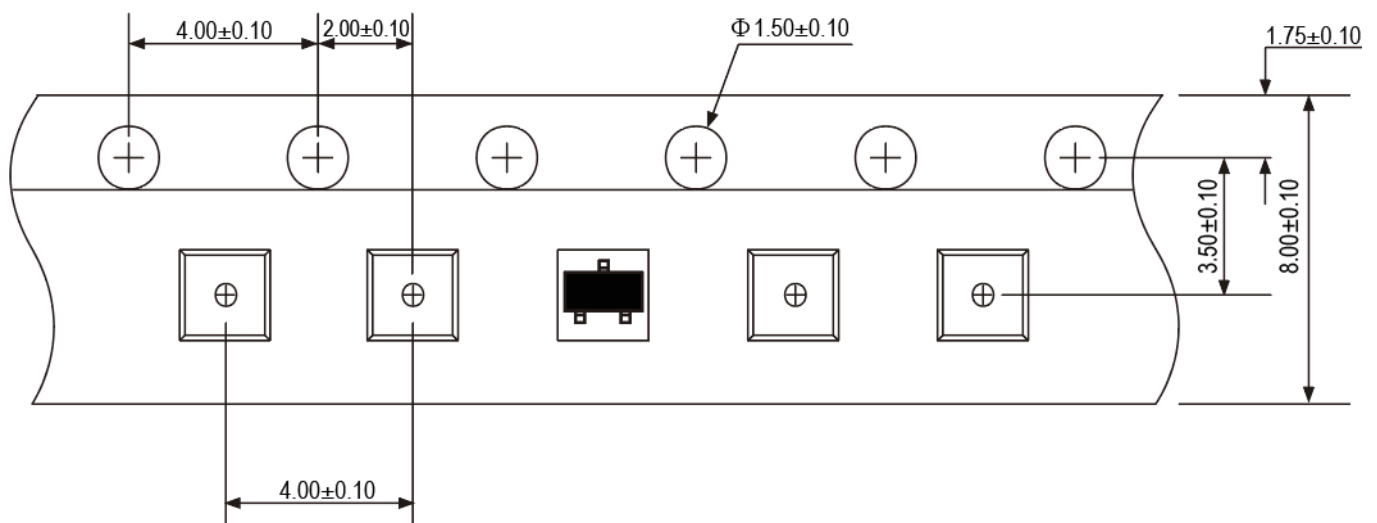
Part Number	Shipping	Reel Size
MMBT4403	3000/Tape & Reel	7 inch

Tape and Reel Information

Reel Dimensions



Tape Dimensions



User Direction of Feed

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