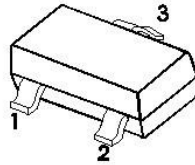


SOT-23



1. BASE

2. EMITTER

3. COLLECTOR

特征 Features

- 与BC807配对;Complementary to BC807
- 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	50	V
Collector-Emitter Voltage	VCEO	45	V
Emitter -Base Voltage	VEBO	5	V
Collector Current-Continuous	IC	500	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)

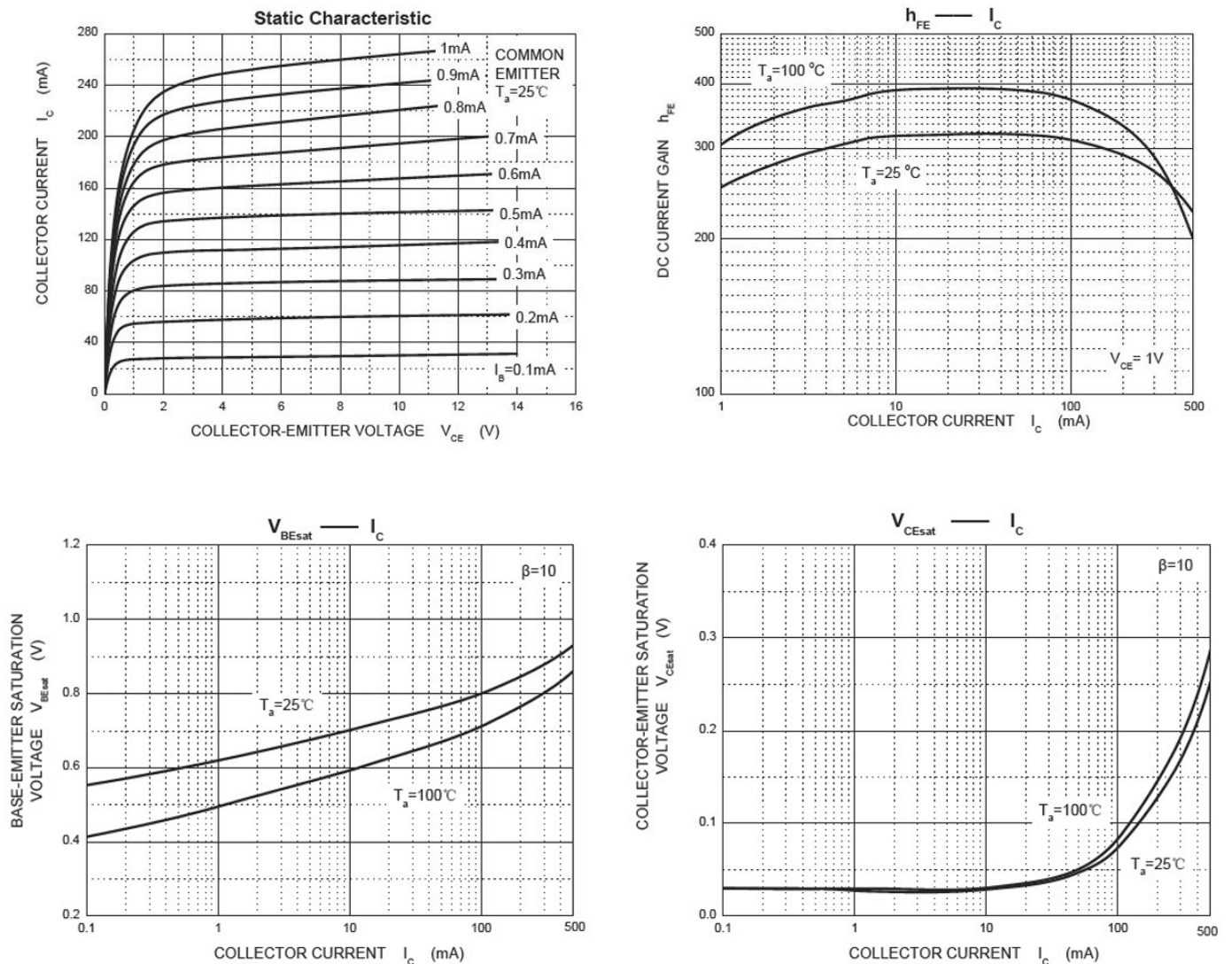
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
Collector-base breakdown voltage	V(BR)CBO	IC=10uA, IE=0	50		V
Collector-emitter breakdown voltage	V(BR)CEO	IC=10mA, IB=0	45		V
Emitter-base breakdown voltage	V(BR)EBO	IE=1uA, IC=0	5		V
Collector cut-off current	ICBO	VCB=45V, IE=0		100	nA
Emitter cut-off current	IEBO	VEB=4V, IC=0		100	nA

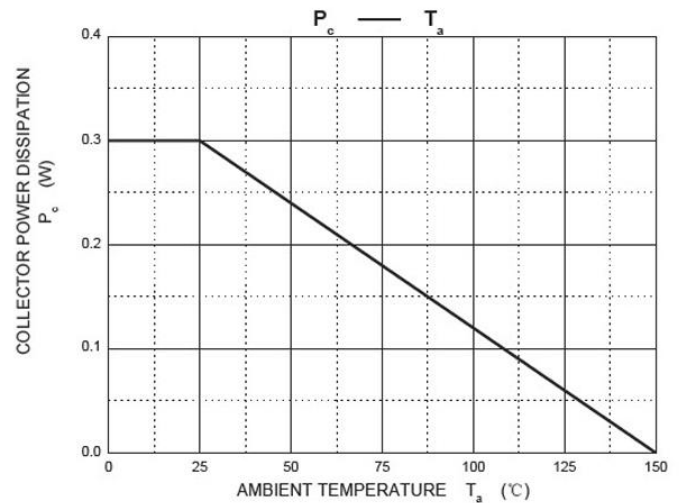
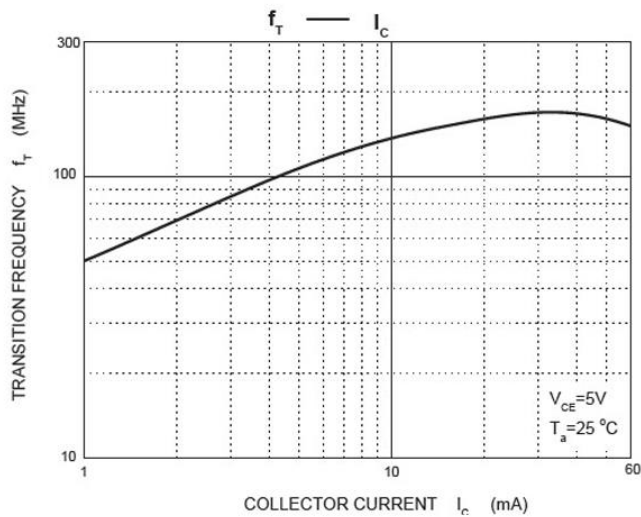
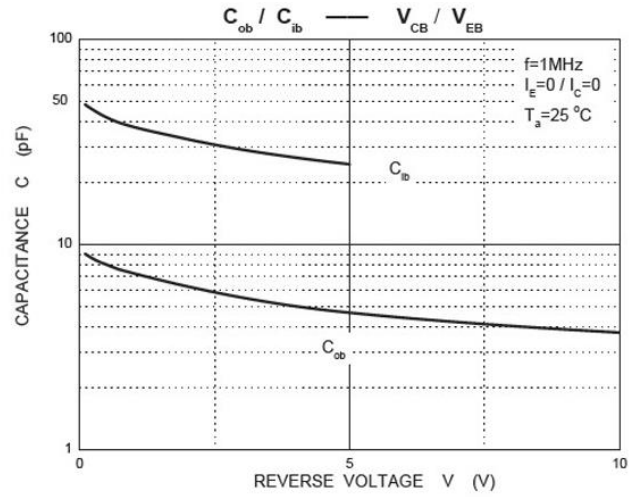
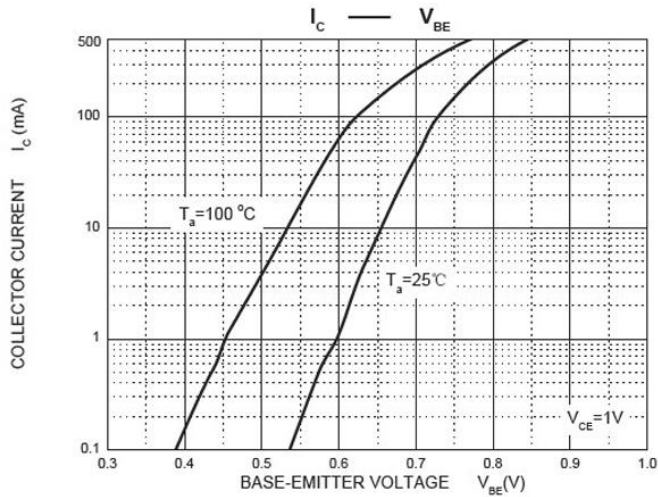
DC current gain	hFE(1)	VCE=1V, IC=100mA	100	600	
	hFE(2)	VCE=1V, IC=500mA	40		
Collector-emitter saturation voltage	VCE(sat)	IC=500mA, IB=50mA		0.70	V
Base -emitter saturation voltage	VBE(sat)	IC=500mA, IB=50mA		1.20	V
Transition frequency	fT	VCE=5V, IC=10mA, f=100MHz	100		MHz

CLASSIFICATION OF hFE(1)

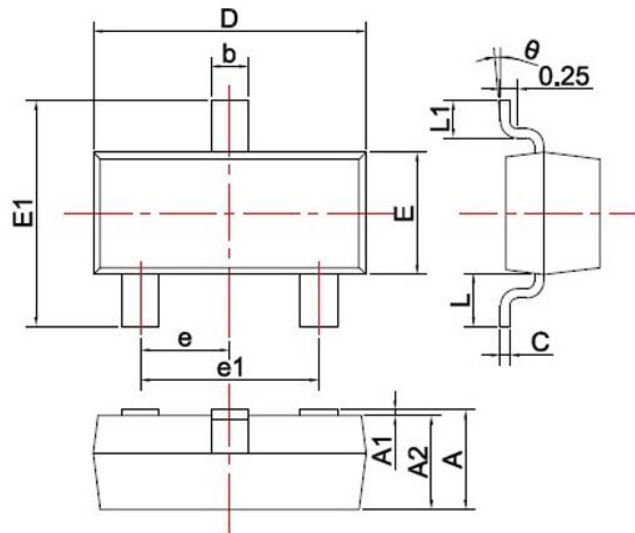
RANK	BC817-16	BC817-25	BC817-40
RANGE	100-250	160-400	250-600
Marking	6A	6B	6C

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





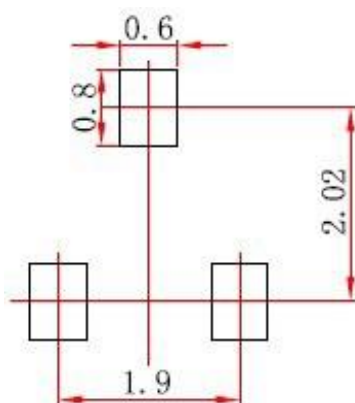
SOT-23 Package Outline Drawing



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
θ	0°	8°

Unit: mm

Suggested Land Pattern



Note:

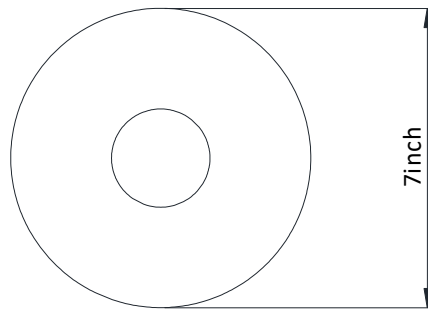
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

Ordering Information

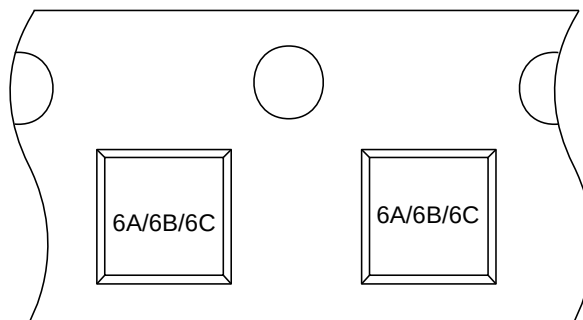
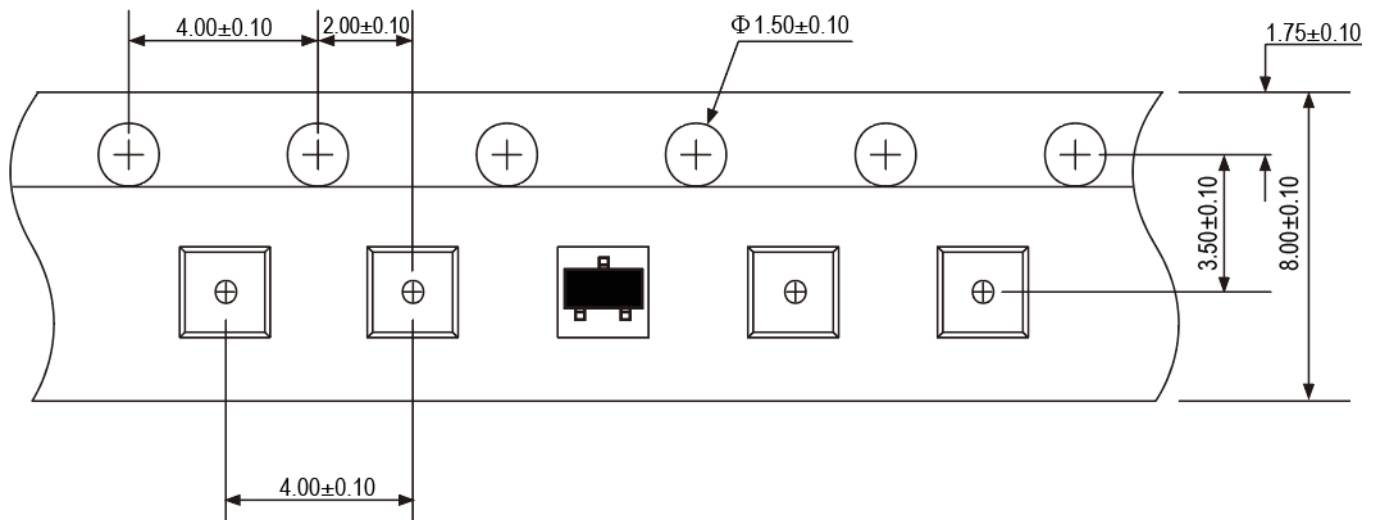
Part Number	Shipping	Reel Size
BC817	3000/Tape & Reel	7 inch

Tape and Reel Information

Reel Dimensions



Tape Dimensions



User Direction of Feed

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