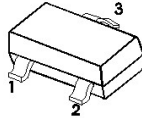


SOT-23

SOT-23 贴片塑封三极管

SOT-23 Plastic-Encapsulate Transistors



- 1. BASE
- 2. EMITTER
- 3. COLLECTOR

Marking:

BC856A=3A	BC856B=3B	
BC857A=3E	BC857B=3F	BC857C=3G
BC858A=3J	BC858B=3K	BC858C=3L

特征 Features

- Complementary to BC846/BC847/BC848
- Power Dissipation of 200mW
- Ideally suited for automatic insertion
- For switching and AF amplifier applications

机械数据 Mechanical Data

- Small Outline Plastic Package
- Epoxy UL: 94V-0
- 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.)

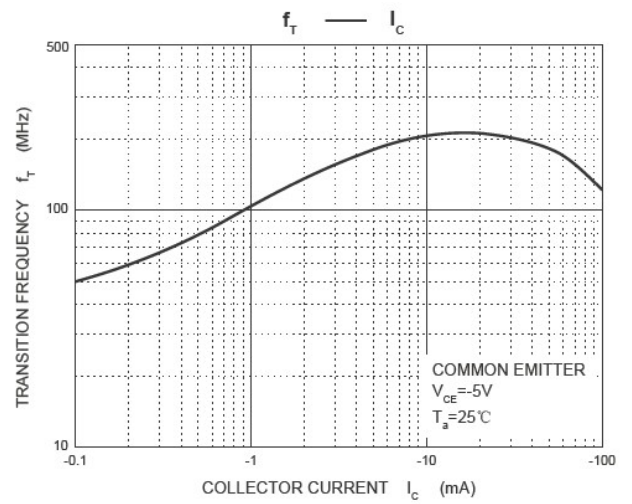
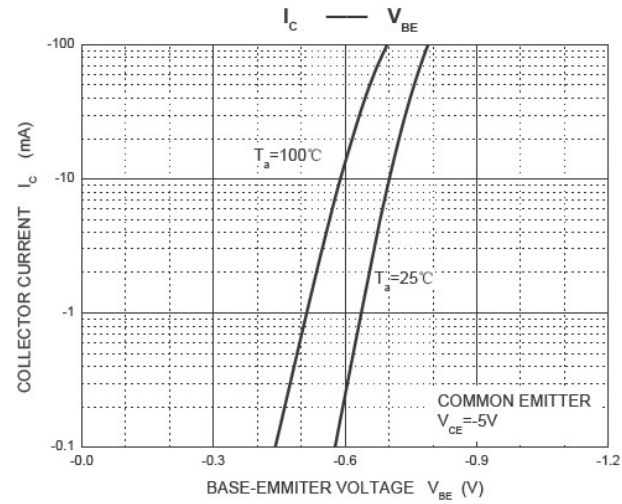
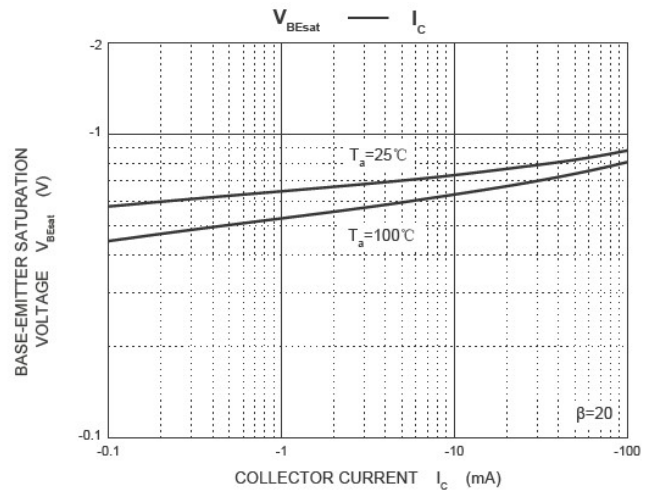
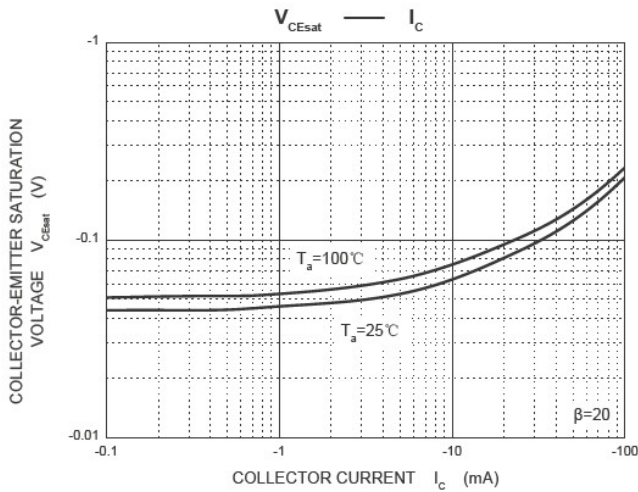
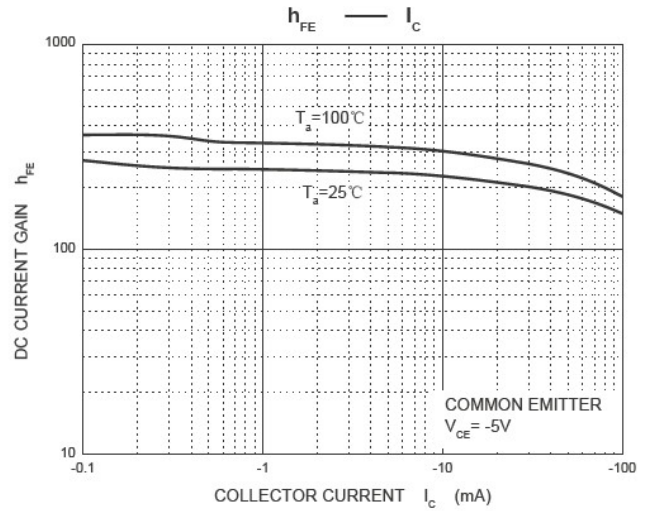
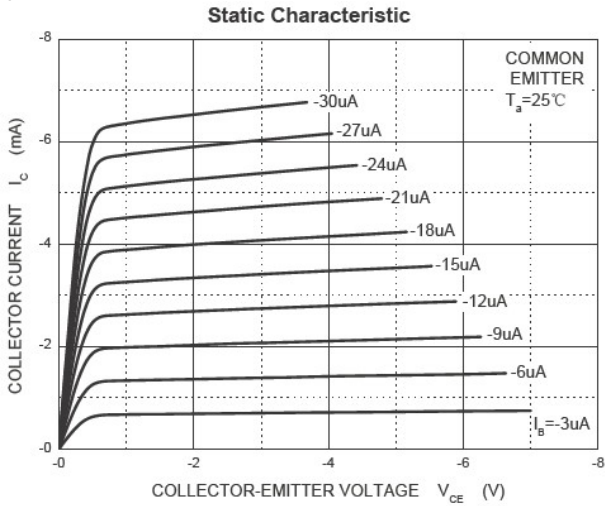
参数 Parameters	符号 Symbol		数值 Value	单位 Unit
Collector-Base Voltage	V _{CB0}	BC856 BC857 BC858	-80 -50 -30	V
Collector-Emitter Voltage	V _{CEO}	BC856 BC857 BC858	-65 -45 -30	V
Emitter -Base Voltage	V _{EBO}		-6	V
Collector Current-Continuous	I _C		-100	mA
Collector Power Dissipation	P _C		200	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}		625	°C/W

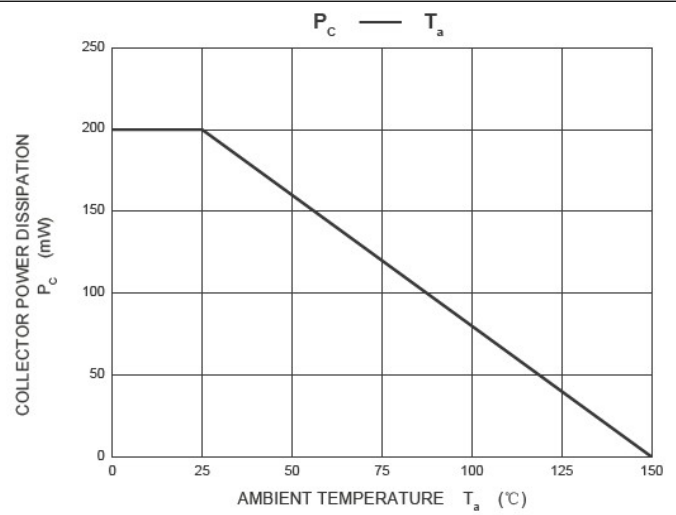
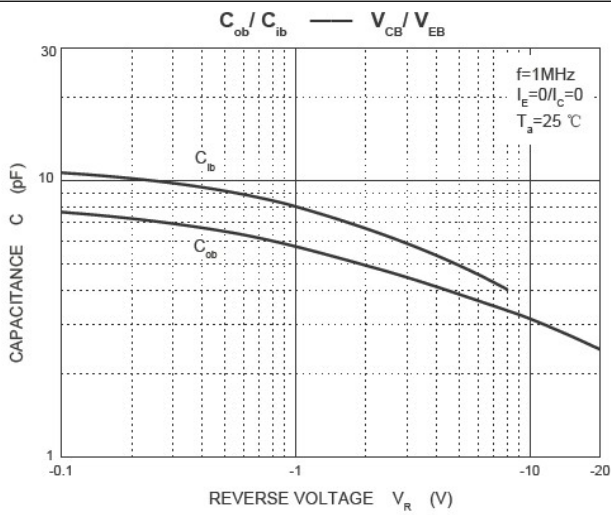
电特性 (TA = 25°C 除非另有规定)

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

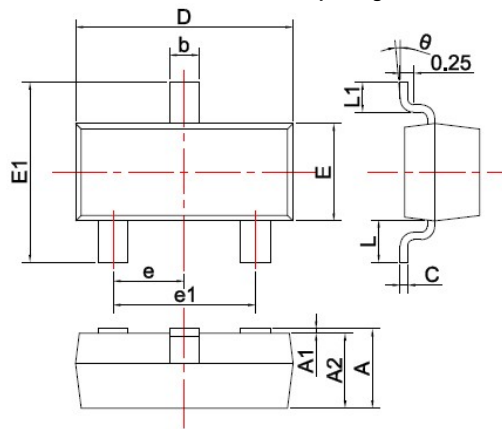
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10uA, I _E =0 BC856 BC857 BC858	-80 -50 -30		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA, I _B =0 BC856 BC857 BC858	-65 -45 -30		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10uA, I _C =0	-6		V
Collector cut-off current	I _{CBO}	V _{CB} =-70V, I _E =0 V _{CB} =-45V, I _E =0 V _{CB} =-25V, I _E =0 BC856 BC857 BC858		-100	nA
Collector cut-off current	I _{CEO}	V _{CE} =-60V, I _B =0 V _{CE} =-40V, I _B =0 V _{CE} =-25V, I _B =0 BC856 BC857 BC858		-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0		-100	nA
DC current gain	h _{FE}	V _{CE} =-5V, I _C =-2mA BC856A;BC857A;BC858A BC856B;BC857B;BC858B BC857C;BC858C	125 220 420	250 475 800	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B =-5mA		-0.50	V
Base -emitter saturation voltage	V _{BE(sat)}	I _C =-100mA, I _B =-5mA		-1.10	V
Transition frequency	f _T	V _{CE} =-5V, I _C =-10mA, f=100MHz	100		MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		4.5	pF

Typical characteristics





SOT-23 PACKAGE OUTLINE Plastic surface mounted package

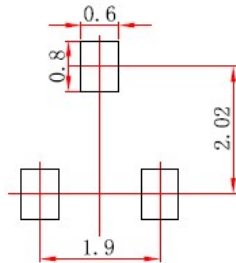


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0 $^\circ$	8 $^\circ$

Unit: mm

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: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.