

FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

MARKING

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



1. BASE
2. EMITTER
3. COLLECTOR

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

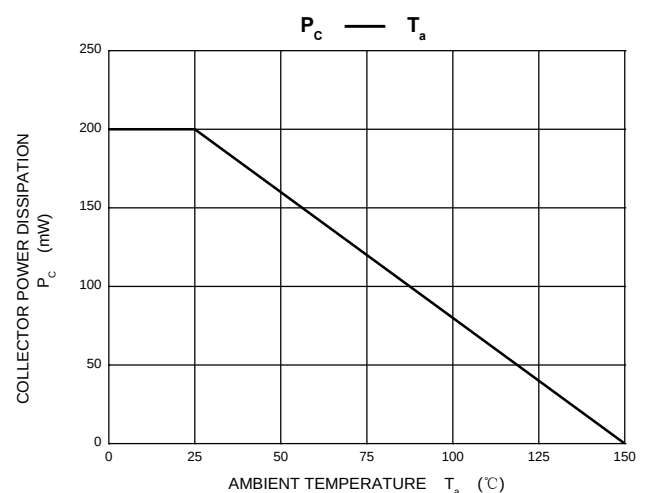
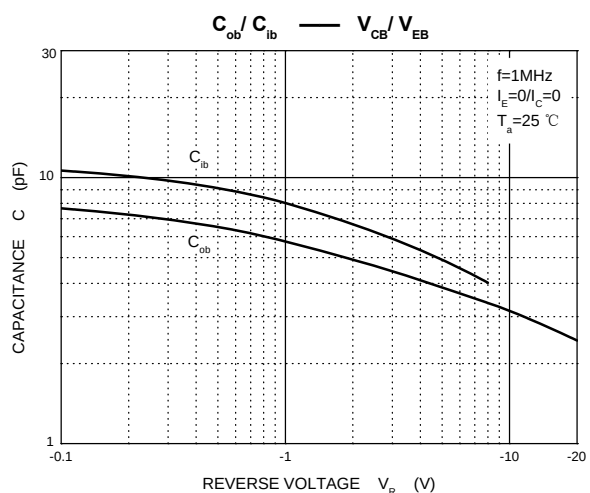
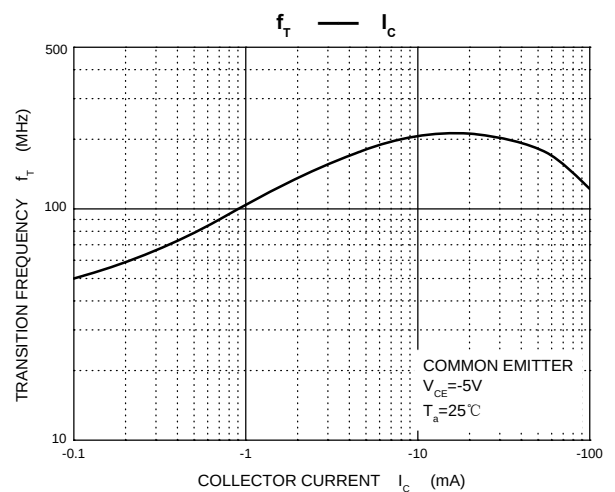
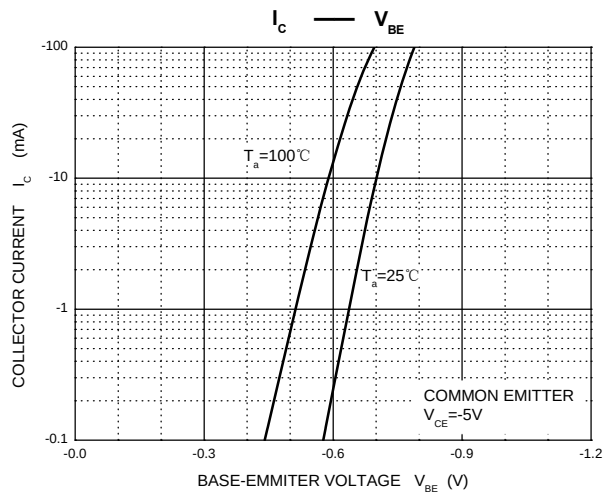
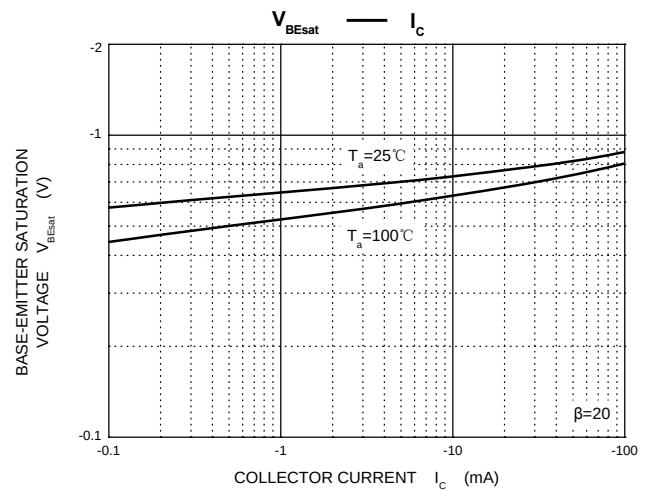
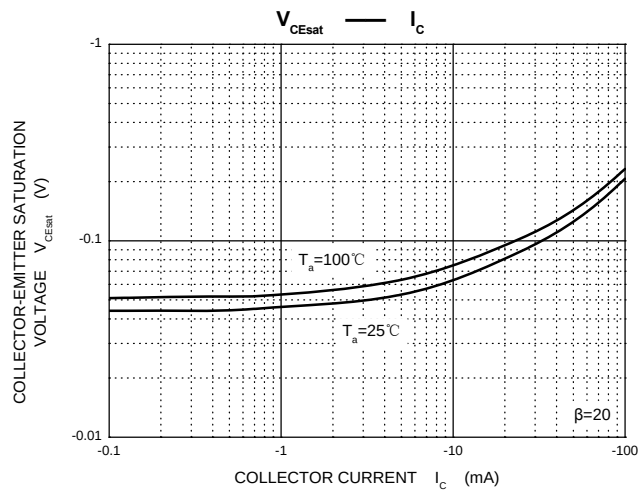
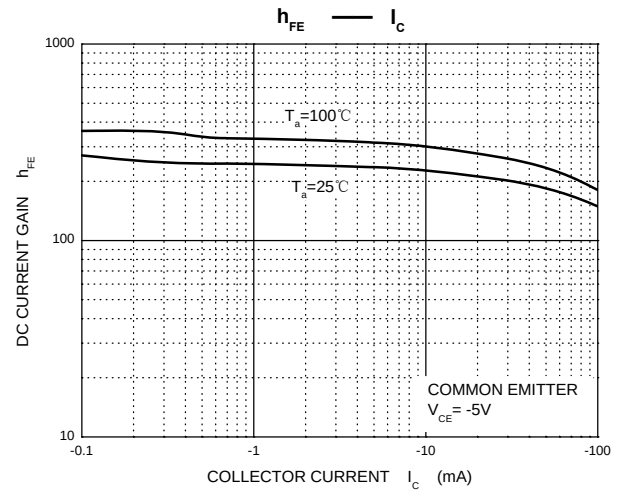
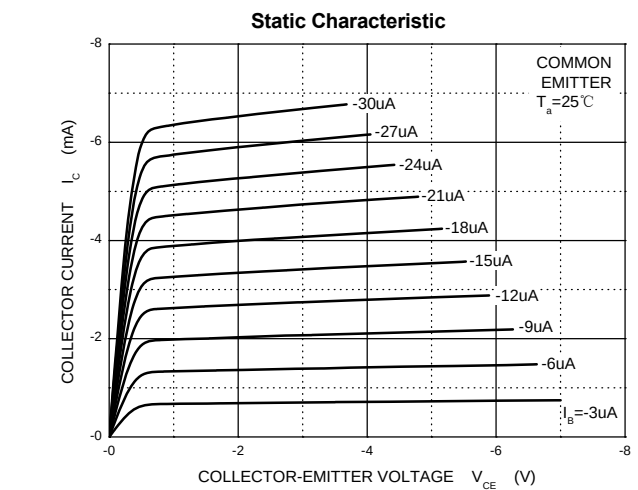
Symbol	Parameter		Value	Unit
V_{CBO}	Collector-Base Voltage	BC856	-80	V
		BC857	-50	
		BC858	-30	
V_{CEO}	Collector-Emitter Voltage	BC856	-65	V
		BC857	-45	
		BC858	-30	
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current –Continuous		-0.1	A
P_C	Collector Power Dissipation		200	mW
R_{θJA}	Thermal Resistance From Junction To Ambient		625	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range		-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

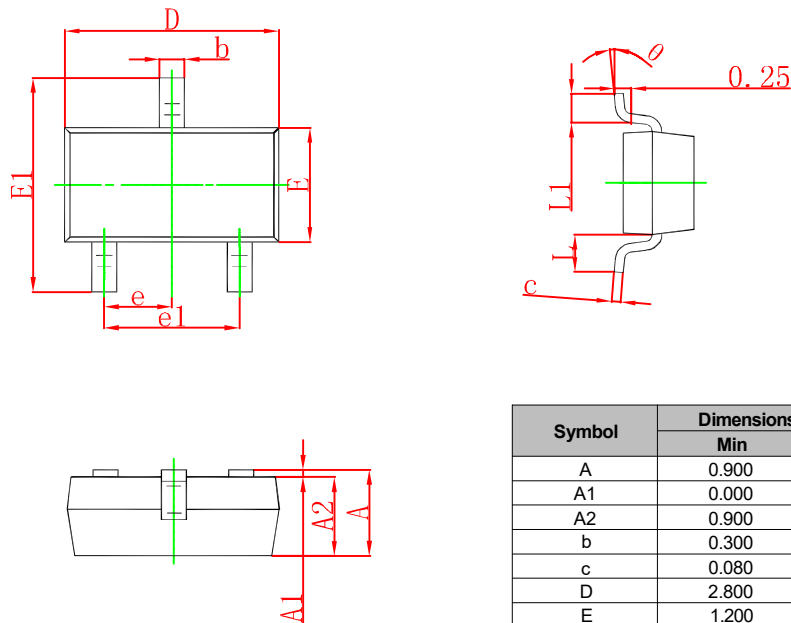
Parameter		Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BC856	V _{CBO}	I _C = -10μA, I _E =0	-80		V
	BC857			-50		
	BC858			-30		
Collector-emitter breakdown voltage	BC856	V _{CEO}	I _C = -10mA, I _B =0	-65		V
	BC857			-45		
	BC858			-30		
Emitter-base breakdown voltage		V _{EBO}	I _E = -1μA, I _C =0	-5		V
Collector cut-off current	BC856	I _{CBO}	V _{CB} = -70 V , I _E =0		-0.1	μA
	BC857		V _{CB} = -45 V , I _E =0			
	BC858		V _{CB} = -25 V , I _E =0			
Emitter cut-off current		I _{EBO}	V _{EB} = -5 V , I _C =0		-0.1	μA
DC current gain	BC856A, 857A,858A	h _{FE}	V _{CE} = -5V,I _C = -2mA	125	250	
	BC856B, 857B,858B			220	475	
	BC857C,BC858C			420	800	
Collector-emitter saturation voltage		V _{CE(sat)}	I _C =-100mA,I _B = -5 mA		-0.5	V
Base-emitter saturation voltage		V _{BE(sat)}	I _C = -100mA, I _B = -5mA		-1.1	V
Transition frequency		f _T	V _{CE} = -5 V, I _C = -10mA f=100MHz	100		MHz
Collector capacitance		C _{ob}	V _{CB} =-10V, f=1MHz		4.5	pF

Typical Characteristics

TRANSISTOR (PNP)

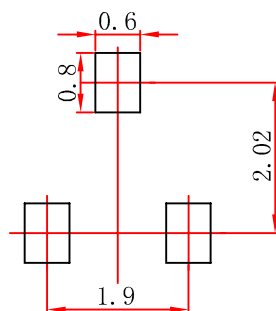


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

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