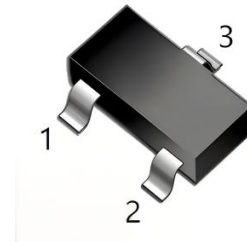


TRANSISTOR (PNP)

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

1. BASE
2. EMITTER
3. COLLECTOR



SOT-23

Features

- Low profile package
- Ideal for automated placement
- Power Dissipation of 200mW
- High Stability and High Reliability

Applications

- amplifying signal
- Electronic switch
- Oscillating circuit
- variable resistance

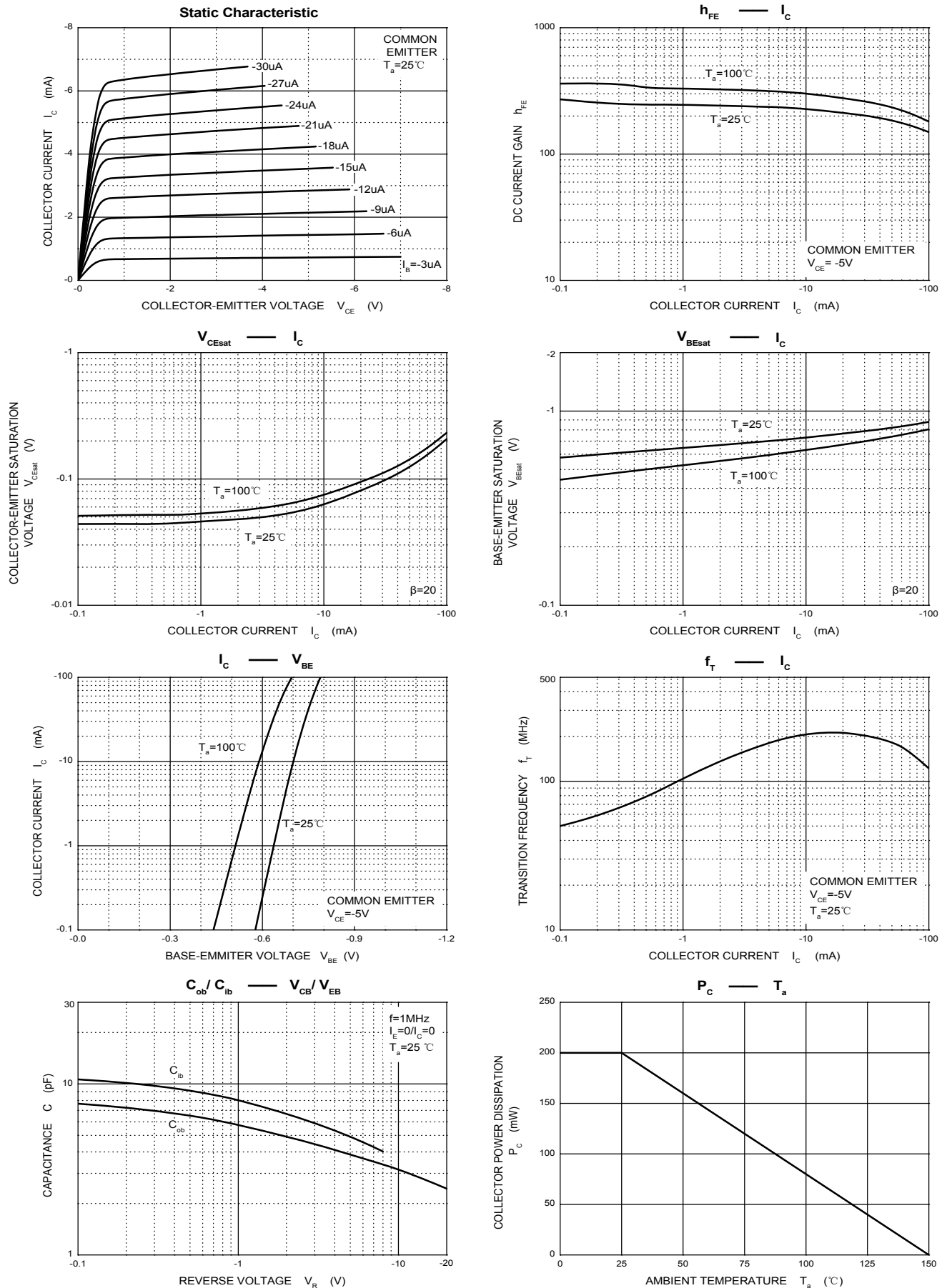
Absolute maximum ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	BC856	BC857	BC858	Unit
V _{CBO}	Collector-Base Voltage	-80	-50	-30	V
V _{CEO}	Collector-Emitter Voltage	-65	-45	-30	V
V _{EBO}	Emitter-Base Voltage	-5			V
I _C	Collector Current Continuous	-100			mA
P _C	Collector Power Dissipation	200			mW
T _J	Junction Temperature	150			°C
T _{STG}	Junction and Storage Temperature	-55 to +150			°C
R _{θJA}	Thermal Resistance From Junction to Ambient	625			°C/W

Electrical characteristics (Ta=25°C unless otherwise noted)

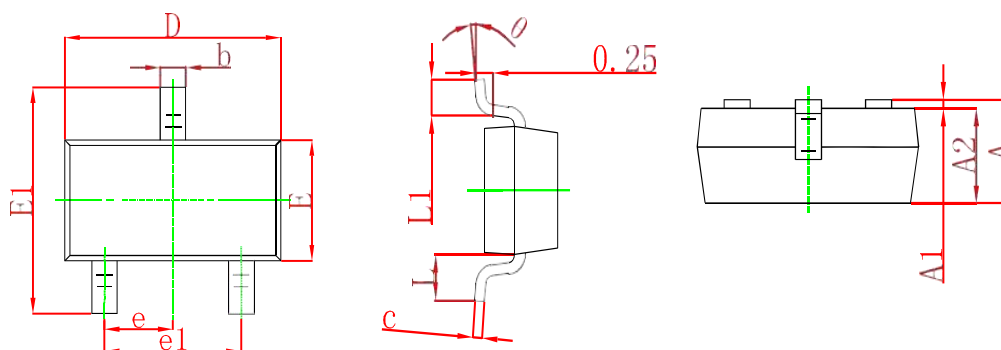
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856 BC857 BC858	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-80 -50 -30		V
Collector-emitter breakdown voltage BC856 BC857 BC858	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-65 -45 -30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5		V
Collector cut-off current BC856 BC857 BC858	I_{CBO}	$V_{CE} = -70V, I_E = 0$ $V_{CE} = -45V, I_E = 0$ $V_{CE} = -25V, I_E = 0$		-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-100	nA
DC current gain BC856A,BC857A,BC858A BC856B,BC857B,BC858B BC857C,BC858C	h_{FE}	$V_{CE} = -5V, I_C = -2mA$	125 220 420	250 475 800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -5mA$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100mA, I_B = -5mA$		-1.1	V
Transition frequency	f_T	$V_{CE} = -5V, I_C = -10mA,$ $f = 100MHz$	100		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, f = 1MHz$		4.5	pF

Typical characteristics



Package Outline Dimensions

SOT-23



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°

***Important Usage Information and Disclaimer**

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