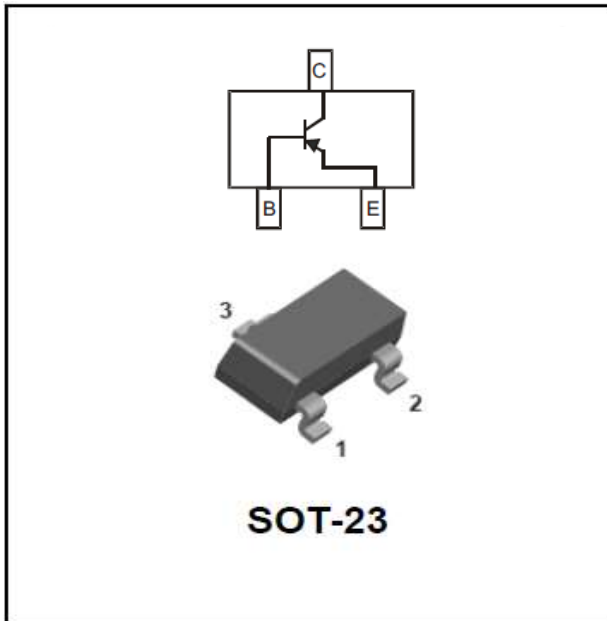


## PNP Transistor



### Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

### Mechanical Data

- **Package:** SOT-23  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:**  
BC856A=3A; BC856B=3B;  
BC857A=3E; BC857B=3F; BC857C=3G;  
BC858A=3J; BC858B=3K; BC858C=3L

### ■ Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
BVCBO	Collector-Base Voltage	BC856	-80
		BC857	-50
		BC858	-30
BVCEO	Collector-Emitter Voltage	BC856	-65
		BC857	-45
		BC858	-30
BVEBO	Emitter-Base Voltage	-6	V
IC	Collector Current –Continuous	-0.1	A
PC	Collector Power Dissipation	200	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	625	°C/W
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C



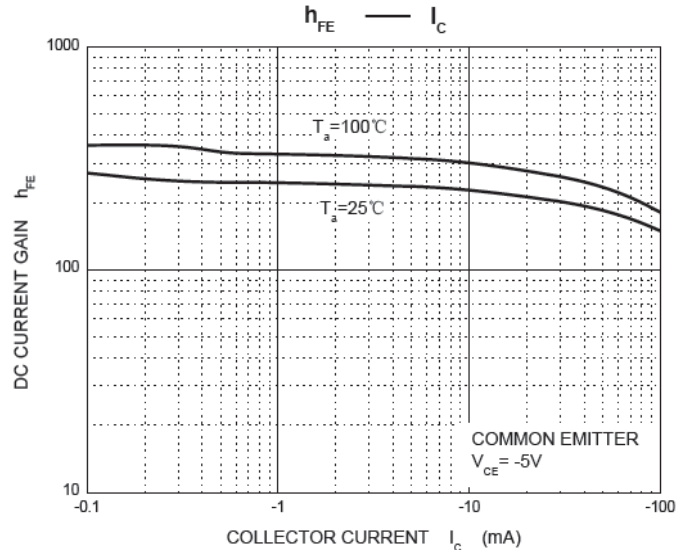
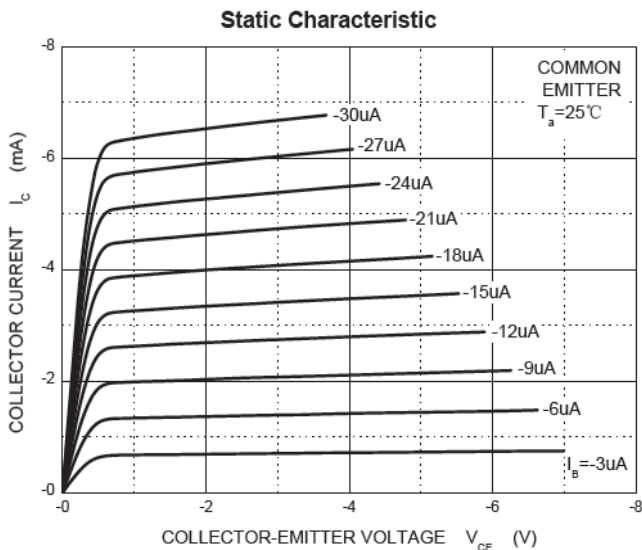
■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856 BC857 BC858	BVCBO	IC= -10μA, IE=0	-80 -50 -30		V
Collector-emitter breakdown voltage BC856 BC857 BC858	BVCEO	IC= -10mA, IB=0	-65 -45 -30		V
Emitter-base breakdown voltage	BVEBO	IE= -1μA, IC=0	-5		V
Collector cut-off current	ICBO	VCB=-30 V ,IE=0		-0.1	μ A
Emitter cut-off current	IEBO	VEB=-5 V , IC=0		-0.1	μ A
DC current gain BC856A,857A,858A BC856B,857B,858B BC857C,BC858C	hFE	VCE= -5V, IC= -2mA	125 220 420	250 475 800	
Collector-emitter saturation voltage	VCE(sat)	IC=-100mA, IB= -5mA		-0.65	V
Base-emitter saturation voltage	VBE(sat)	IC=-100mA, IB= -5mA		-1.1	V
Transition frequency	fT	VCE= -5 V, IC= -10mA f=100MHz	100		MHz
Collector output capacitance	Cob	VCB=-10V,f=1MHz		4.5	pF

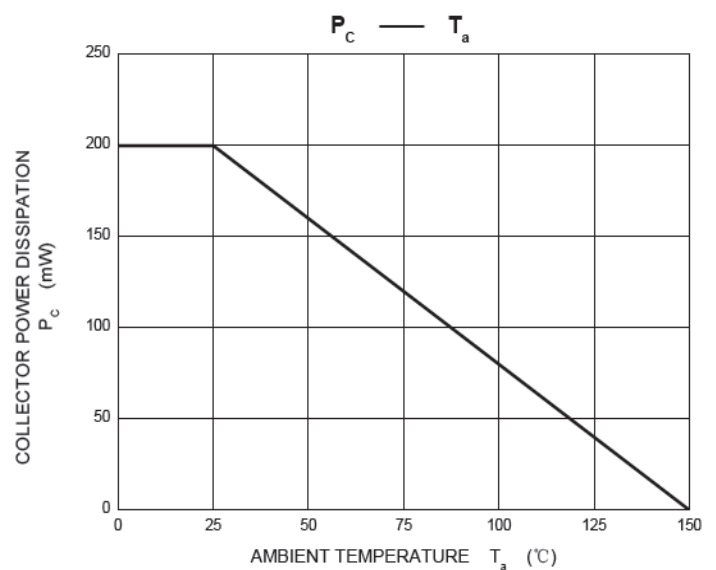
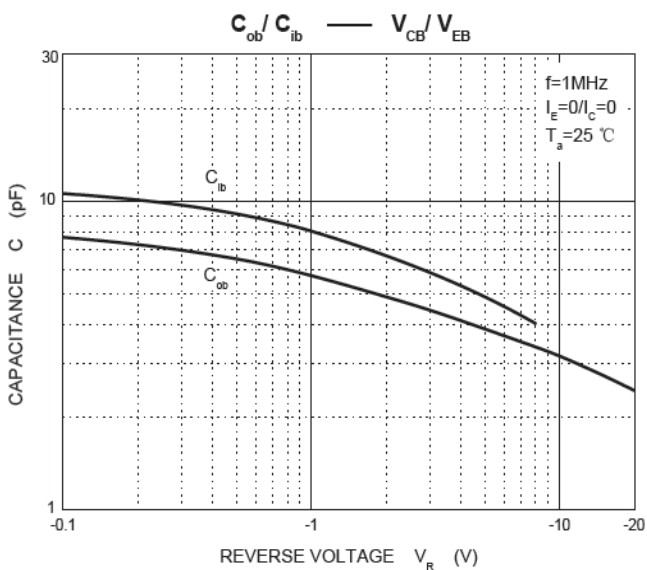
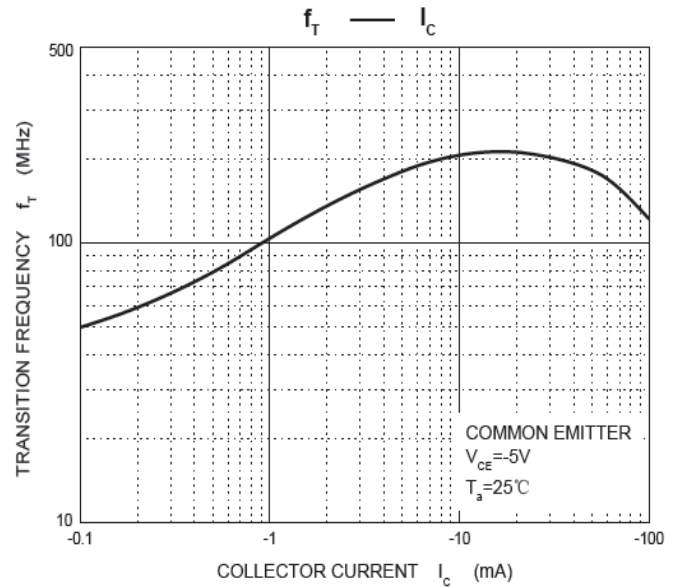
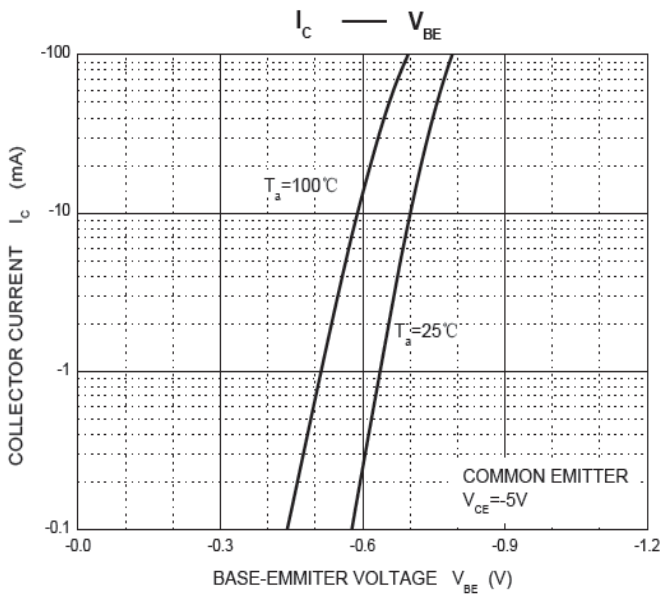
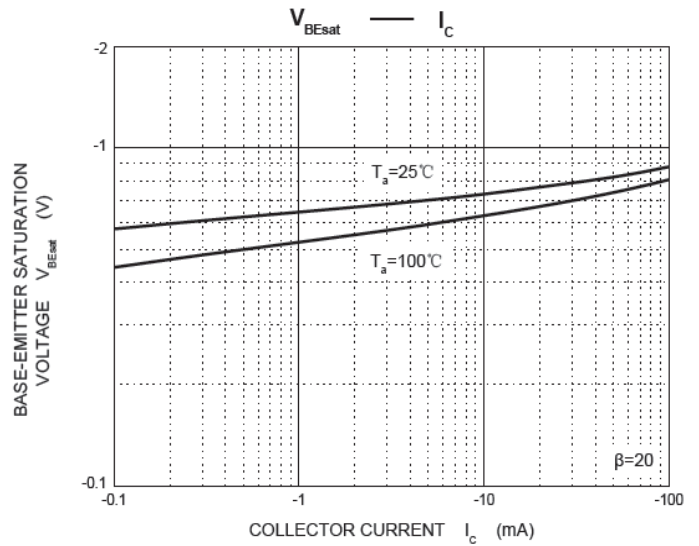
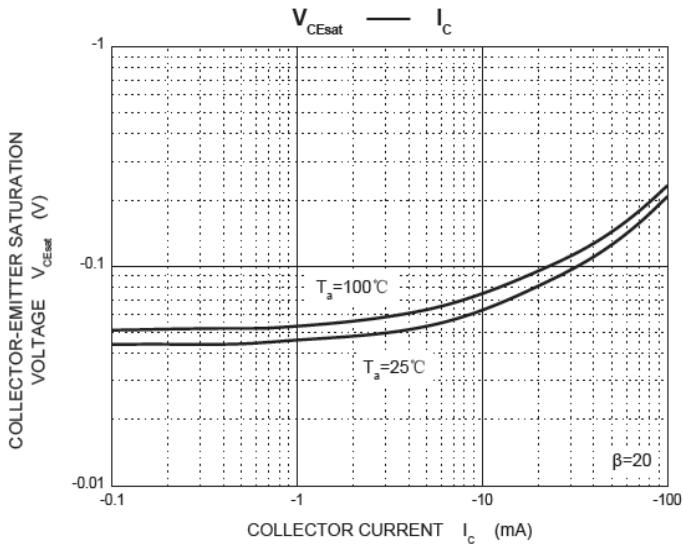
■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BC856/BC857/BC858	F2	Approximate 0.008	3000	30000	120000	7" reel

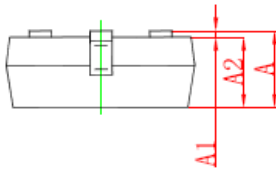
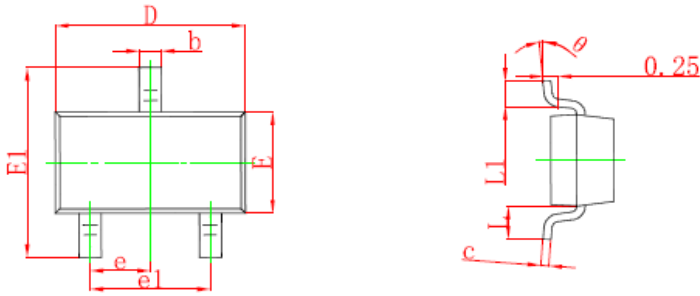
■ Characteristics(Typical)



21J

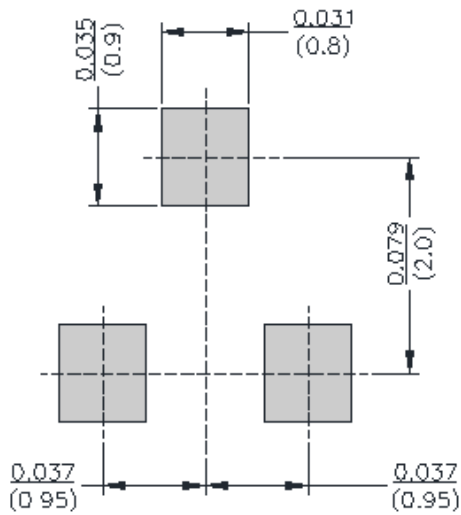


## ■ SOT-23 Package Outline Dimensions



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





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