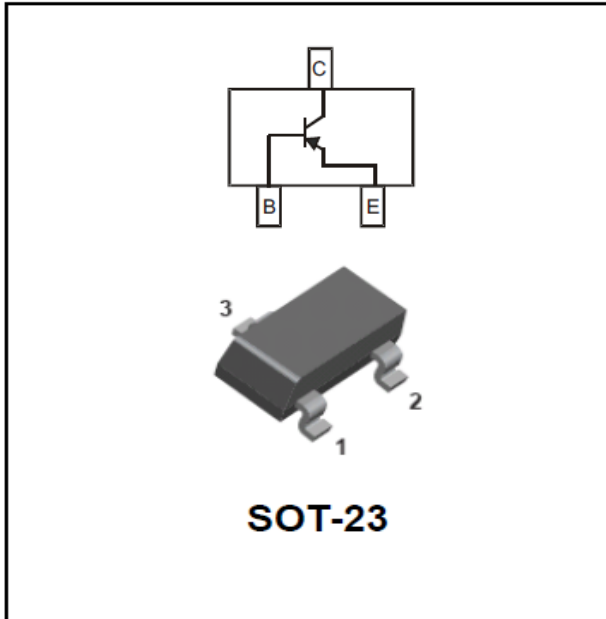


PNP Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- 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
V_{CBO}	Collector-Base Voltage BC856 BC857 BC858	-80 -50 -30	V
V_{CEO}	Collector-Emitter Voltage BC856 BC857 BC858	-65 -45 -30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.1	A
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

**■ Electrical Characteristics** (Ta=25℃ unless otherwise noted)

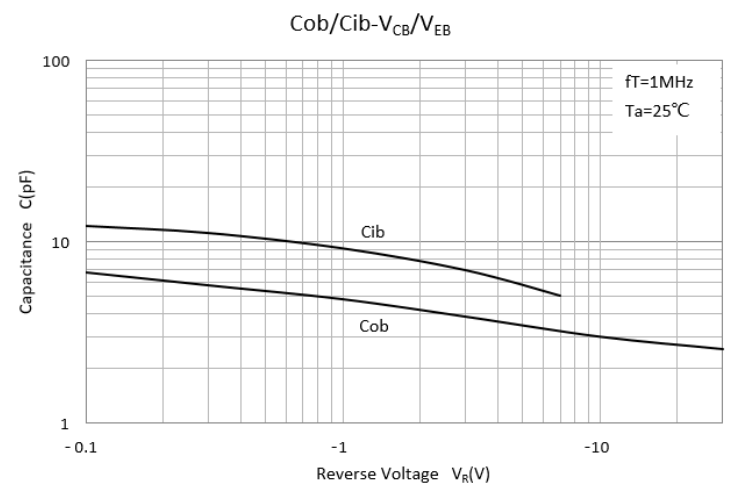
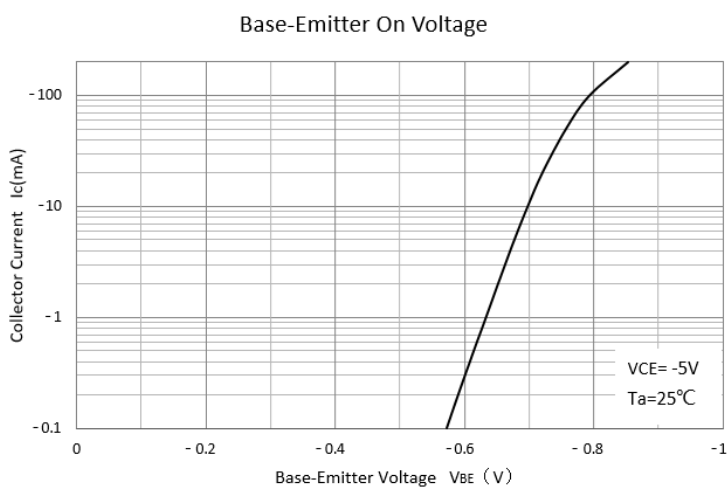
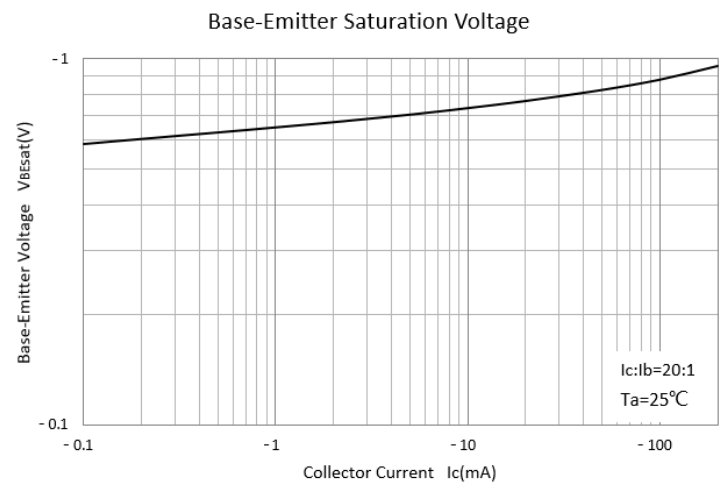
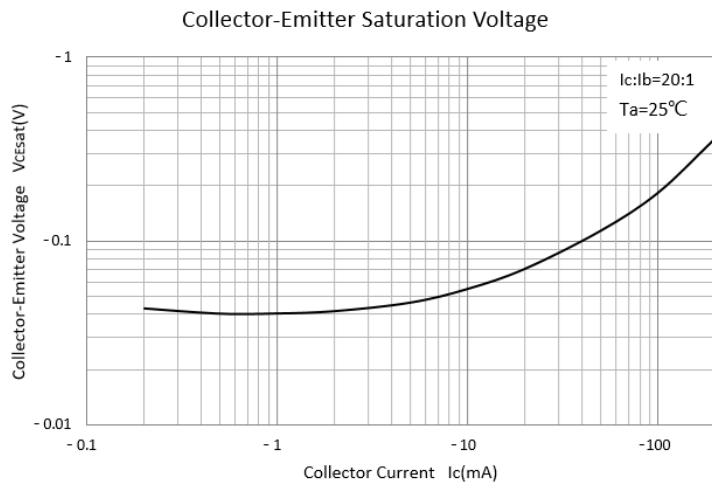
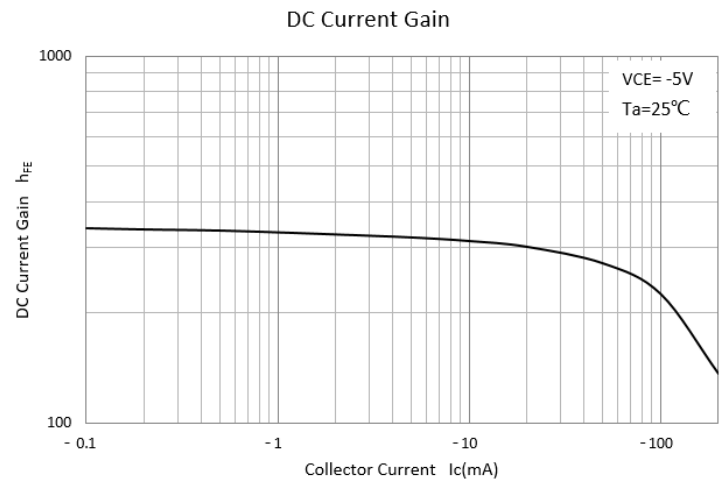
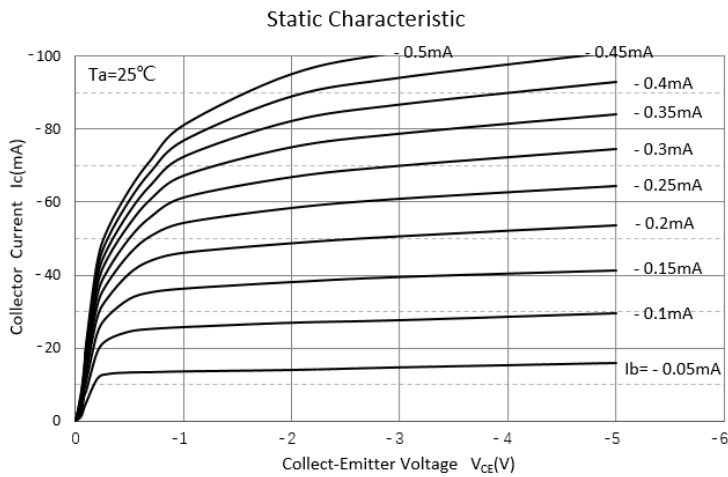
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856 BC857 BC858	V_{CBO}	$I_C = -10\mu A, I_E = 0$	-80 -50 -30		V
Collector-emitter breakdown voltage BC856 BC857 BC858	V_{CEO}	$I_C = -10mA, I_B = 0$	-65 -45 -30		V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -1\mu A, I_C = 0$	-5		V
Collector-base cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$		-0.1	μA
Emitter-base cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-0.1	μA
DC current gain BC856A,857A,858A BC856B,857B,858B BC857C,BC858C	h_{FE}	$V_{CE} = -5V, I_C = -2mA$	125 220 420	250 475 800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -5mA$		-0.65	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-base output capacitance	Cob	$V_{CB} = -10V, f = 1MHz$		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

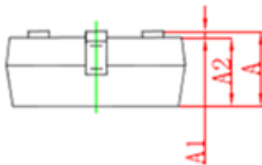
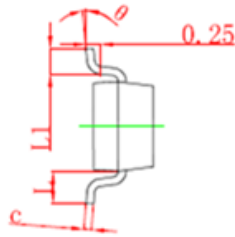
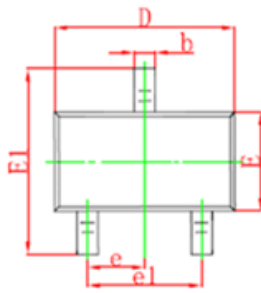


■ Characteristics(Typical)



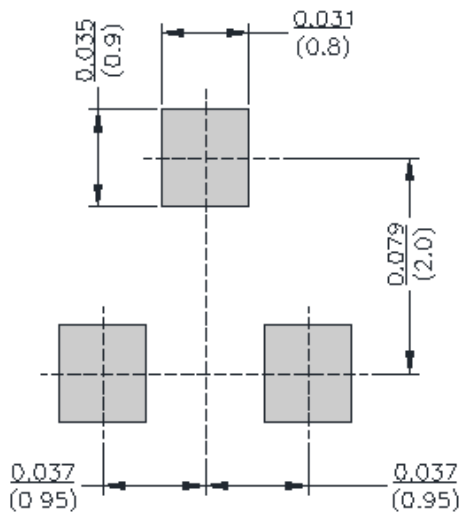


■SOT-23 Package Outline Dimensions



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	0.100	0.200	0.004	0.008
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	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°		8°	

■SOT-23 Soldering Footprint





Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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