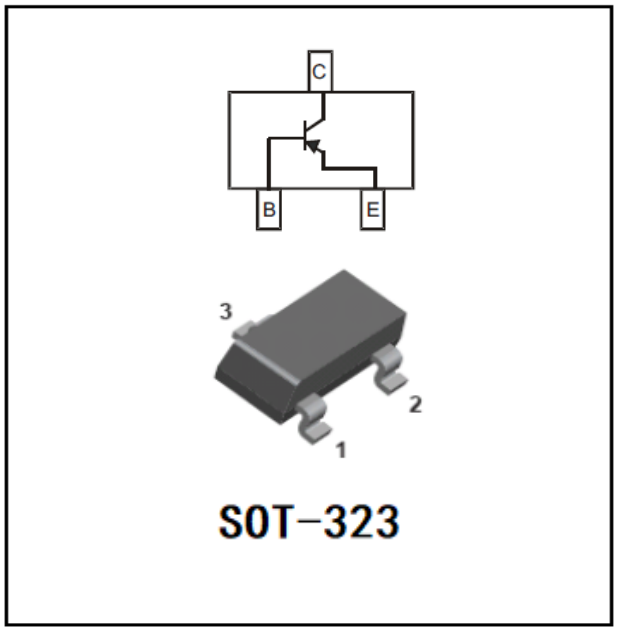
PNP Transistor



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-323

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**:

BC856AW	3A
BC856BW	3B
BC857AW	3E
BC857BW	3F
BC857CW	3G
BC858AW	3J
BC858BW	3K
BC858CW	3L

■ **Maximum Ratings** (Ta=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage BC856AW、BC856BW BC857AW、BCB57BW、BC857CW BC858AW、BC858BW、BC858CW	 -80 -50 -30	V
V_{CEO}	Collector-Emitter Voltage BC856AW、BC856BW BC857AW、BC857BW、BC857CW BC858AW、BC858BW、BC858CW	 -65 -45 -30	V
V_{EBO}	Emitter-Base Voltage	-6	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	℃/W
Tj	Junction Temperature	150	℃
Tstg	Storage Temperature	-55～+150	℃

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

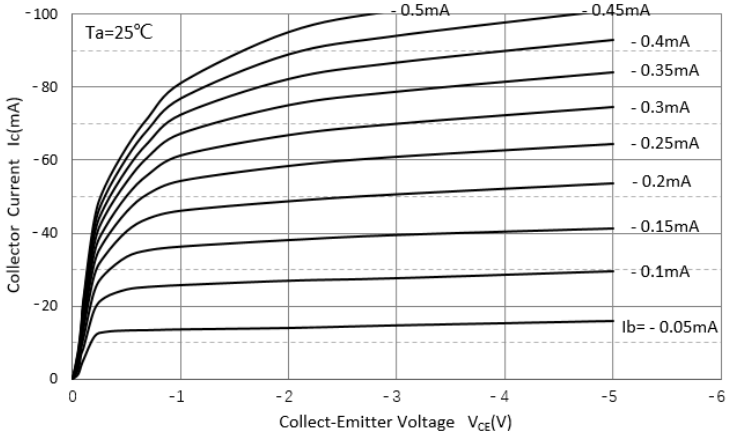
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856 BC857 BC858	V_{CBO}	IC= -10μA, IE=0	 -80 -50 -30		V
Collector-emitter breakdown voltage BC856 BC857 BC858	V_{CEO}	IC= -10mA, IB=0	 -65 -45 -30		V
Emitter-base breakdown voltage	V_{EBO}	IE= -1μA, IC=0	-5		V
Collector-base cut-off current	I_{CBO}	VCB=-30 V ,IE=0		-0.1	μA
Emitter-base cut-off current	I_{EBO}	VEB=-5 V , IC=0		-0.1	μA
DC current gain BC856AW,BC857AW,BC858AW BC856BW,BC857BW,BC858BW BC857CW,BC858CW	h_{FE}	VCE= -5V, IC= -2mA	 125 220 420	 250 475 800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	IC=-100mA, IB= -5mA		-0.65	V
Base-emitter saturation voltage	$V_{BE(sat)}$	IC=-100mA, IB= -5mA		-1.1	V
Transition frequency	f_T	VCE= -5 V, IC= -10mA f=100MHz	100		MHz
Collector-base output capacitance	Cob	VCB=-10V,f=1MHz		4.5	pF

■ Ordering Information (Example)

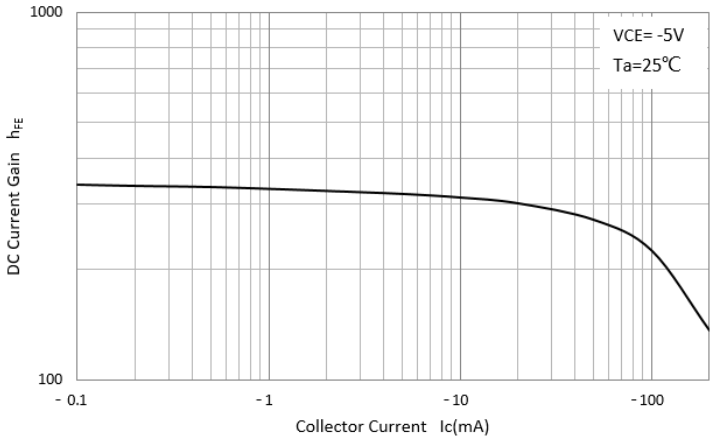
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BC856AW THRU BC858CW	F2	Approximate 0.005	3000	30000	120000	7” reel

■ **Characteristics**(Typical)

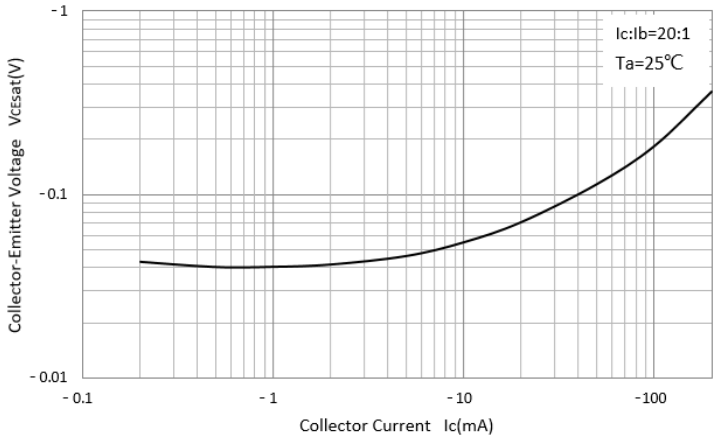
Static Characteristic



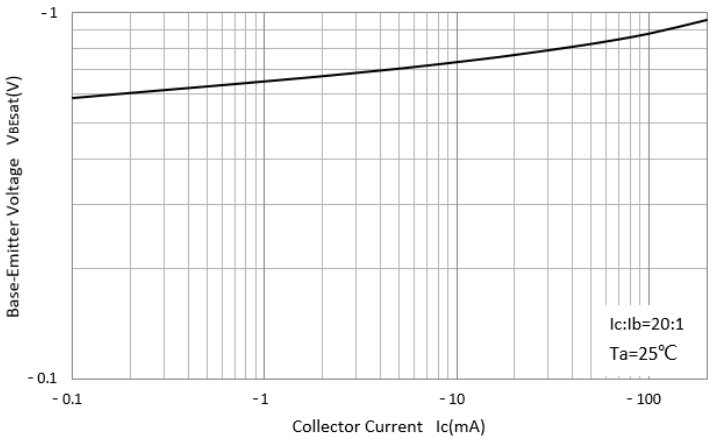
DC Current Gain



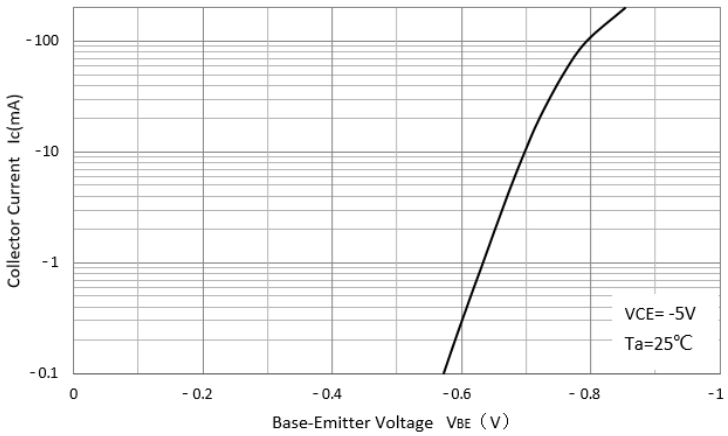
Collector-Emitter Saturation Voltage



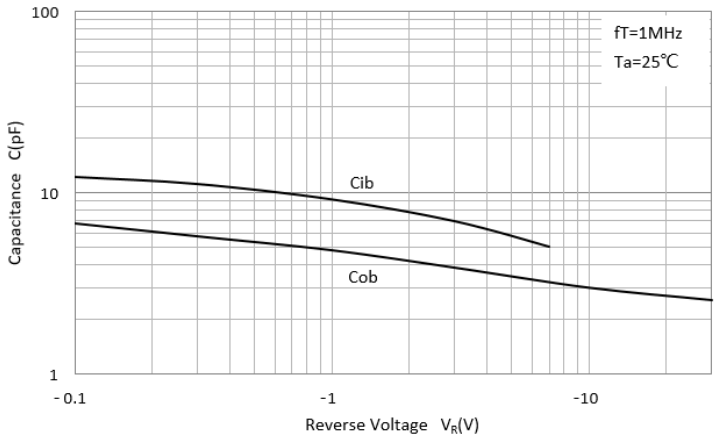
Base-Emitter Saturation Voltage



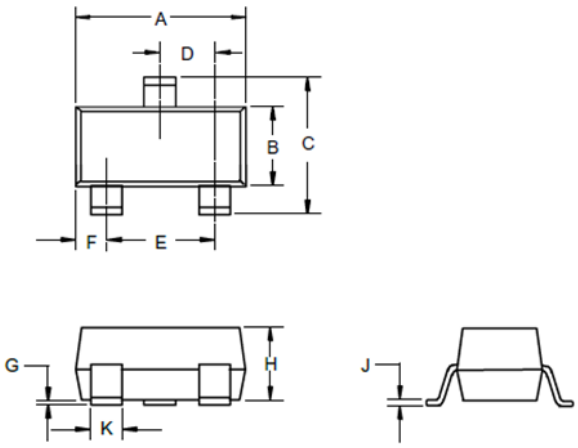
Base-Emitter On Voltage



Cob/Cib-V_{CB}/V_{EB}

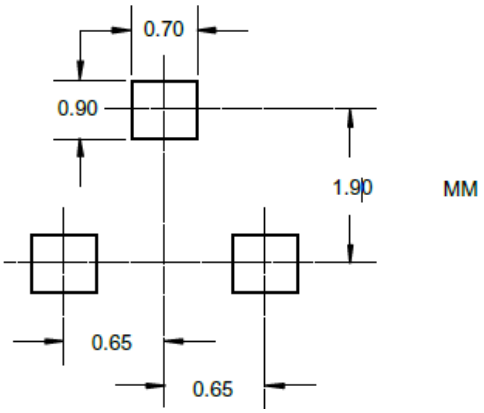


■ SOT-323 Package Outline Dimensions



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

■ SOT-323 Soldering Footprint



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