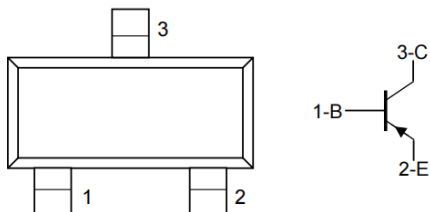


SOT-323



PIN1:Base PIN2:Emitter PIN3:Collector

Features

- For AF input stages and driver applications
- High current gain
- Low collector-emitter saturation voltage

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage		
	BC856W	-80	V
	BC857W	-50	
	BC858W	-30	
V_{CEO}	Collector-Emitter Voltage		
	BC856W	-65	V
	BC857W	-45	
	BC858W	-30	
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	-0.1	A
P_C*	Collector Power Dissipation	150	mW
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-65-150	°C

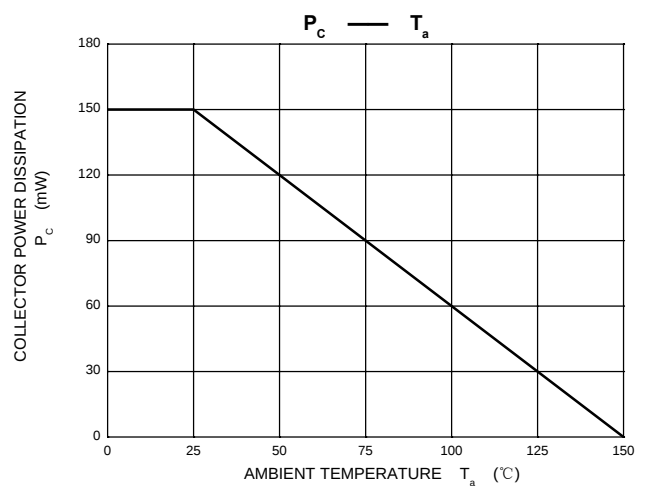
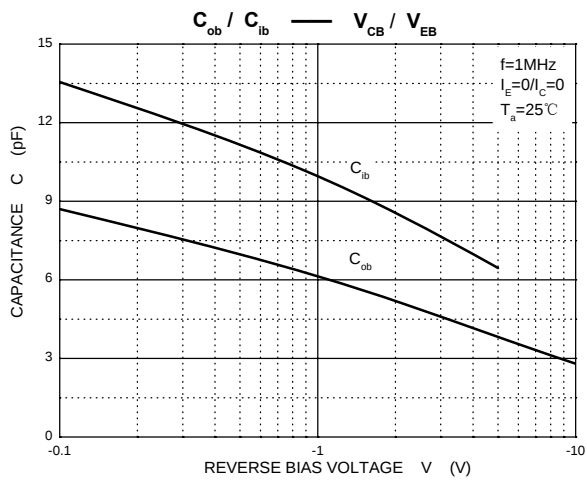
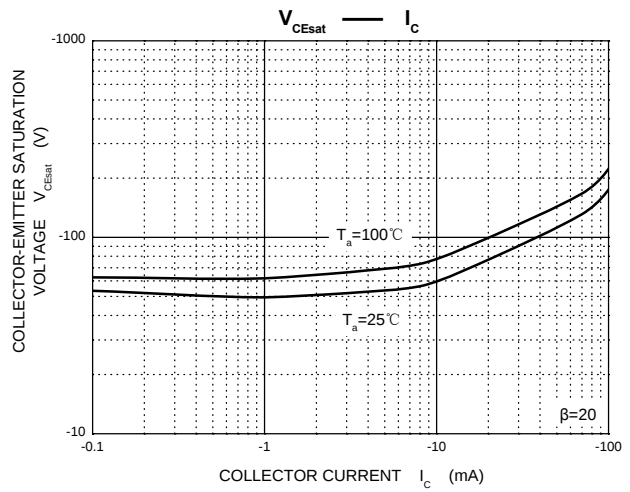
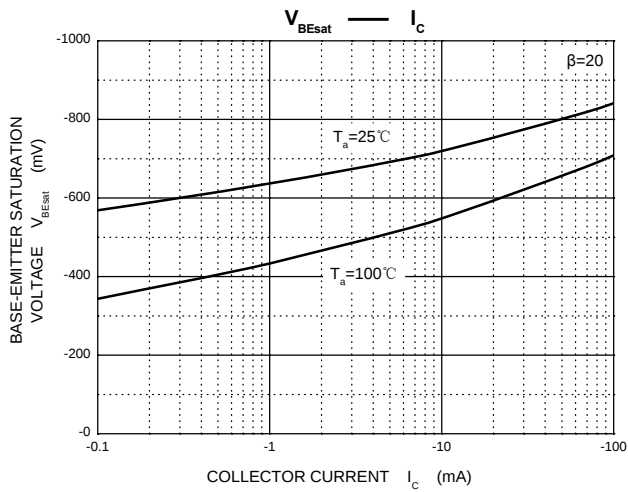
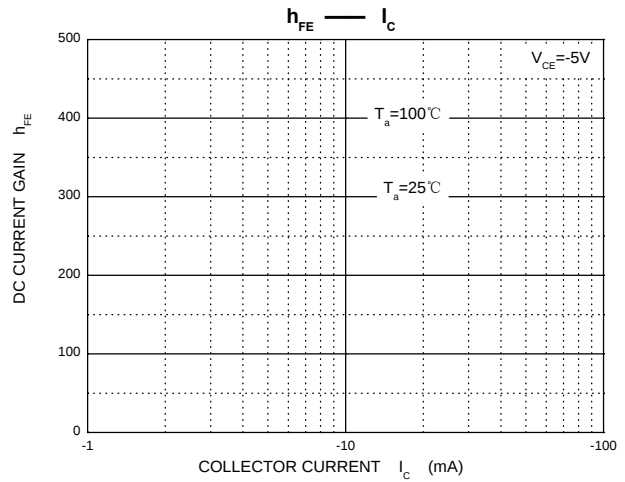
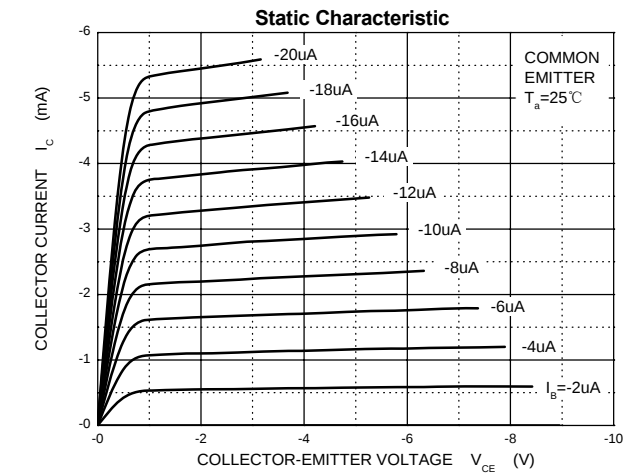
DEVICE MARKING

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

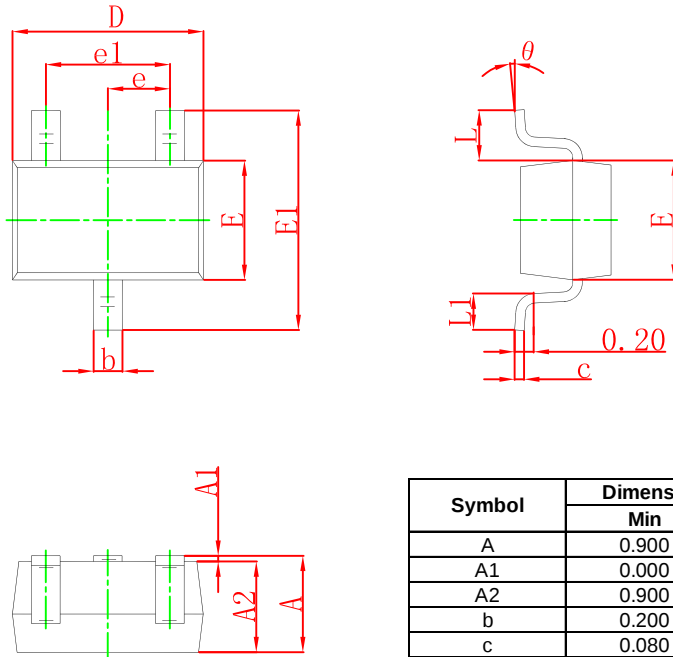
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856W BC857W BC858W	V _{CBO}	I _C = -10μA, I _E =0	-80 -50 -30		V
Collector-emitter breakdown voltage BC856W BC857W BC858W	V _{CEO}	I _C = -10mA, I _B =0	-65 -45 -30		V
Emitter-base breakdown voltage	V _{EBO}	I _E = -1μA, I _C =0	-5		V
Collector cut-off current	I _{CBO}	V _{CB} = -30 V , I _E =0		-15	nA
DC current gain BC856AW, 857AW,858AW BC856BW, 857BW,858BW BC857CW,BC858CW	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 capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		4.5	pF

Typical Characteristics

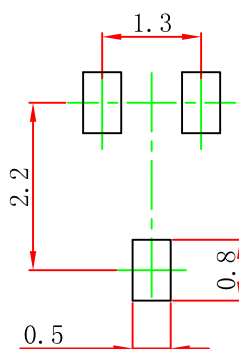


SOT-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-323 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.