

SOT-323 Plastic-Encapsulate Transistors

BC856W TRANSISTOR (PNP)

BC857W

BC858W

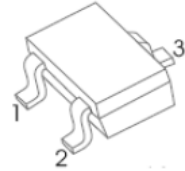
FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

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
I_{CM}	Peak Collector Current	-0.1	A
P_C*	Collector Power Dissipation	150	mW
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-65-150	°C

SOT-323



1. BASE
2. EMITTER
3. COLLECTOR

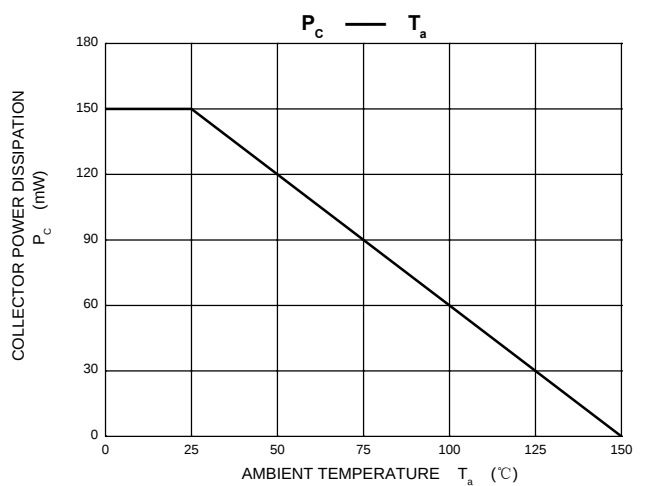
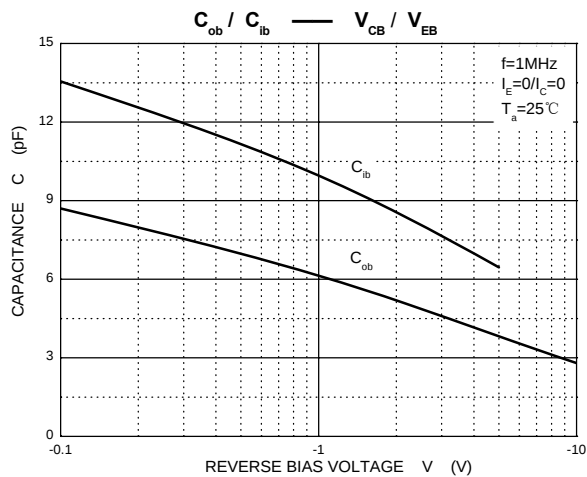
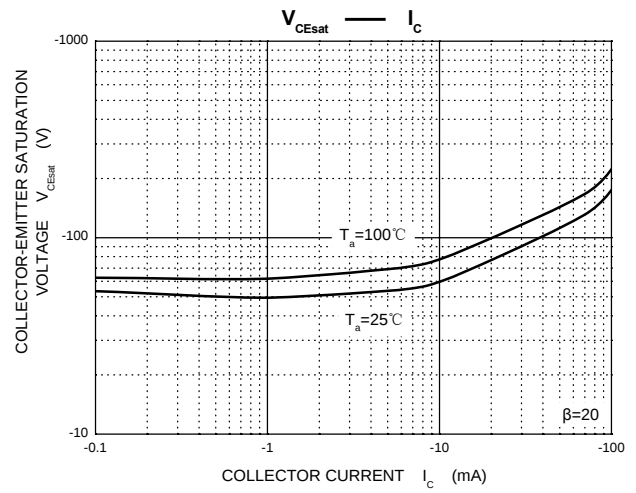
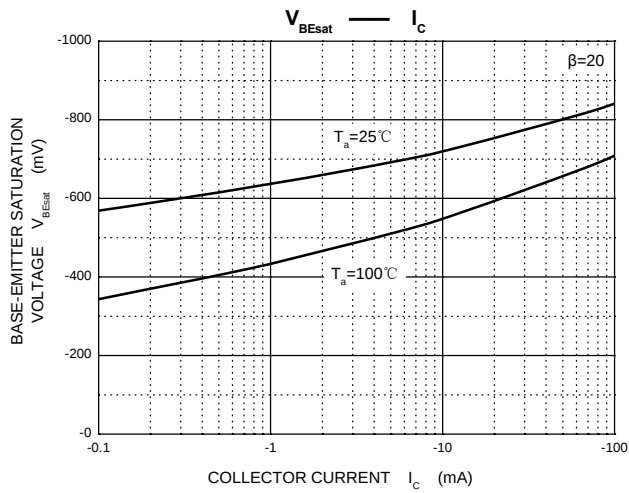
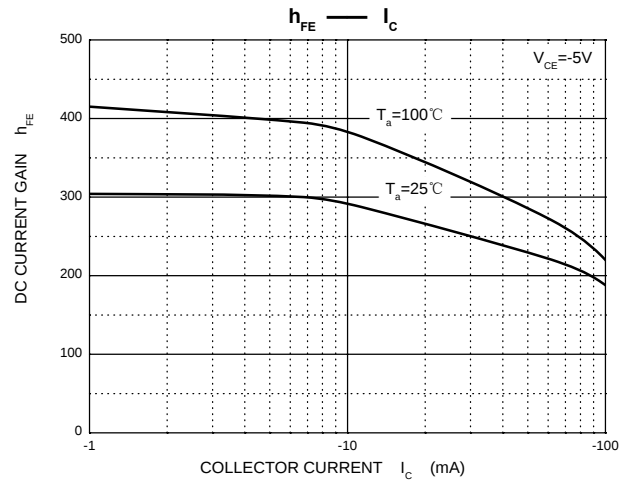
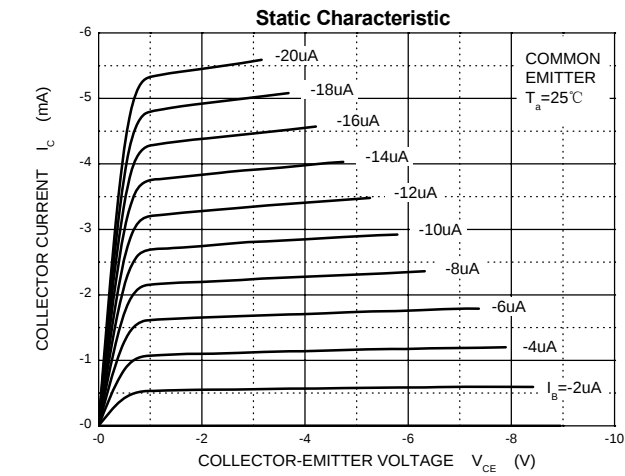
DEVICE MARKING

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

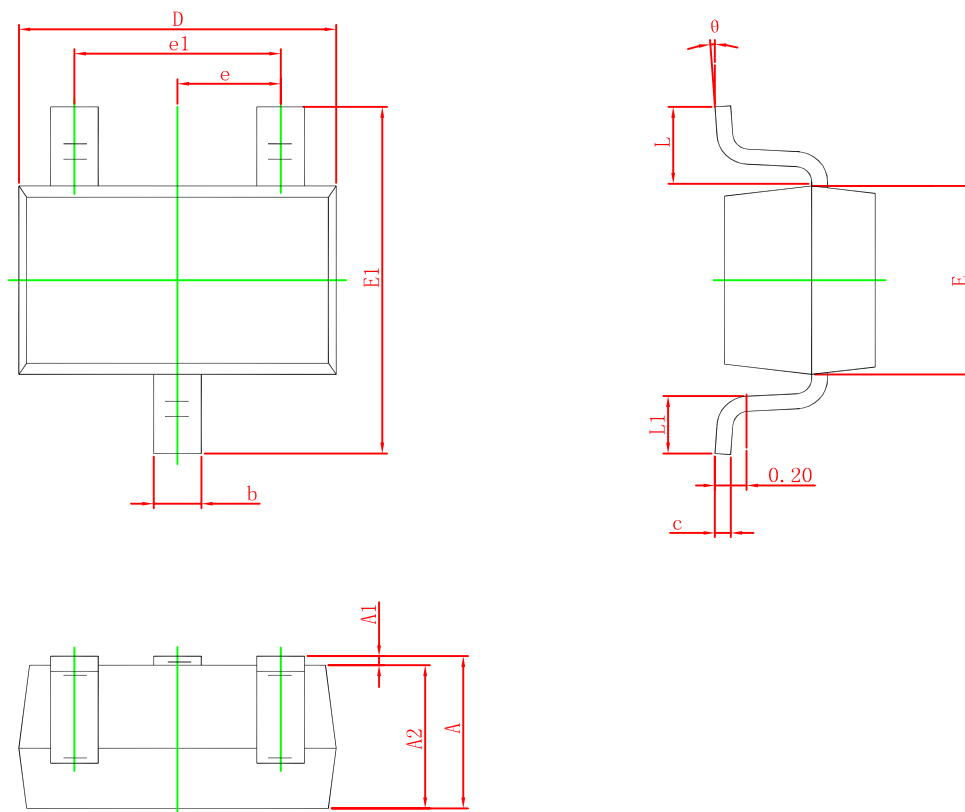
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

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	0.800	1.000	0.031	0.039
b	0.200	0.400	0.008	0.016
c	0.050	0.150	0.002	0.006
D	1.900	2.200	0.075	0.087
E	1.150	1.350	0.045	0.053
E1	2.000	2.450	0.079	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°