

Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

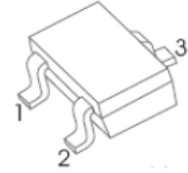
FEATURES

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

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65-150	$^{\circ}\text{C}$

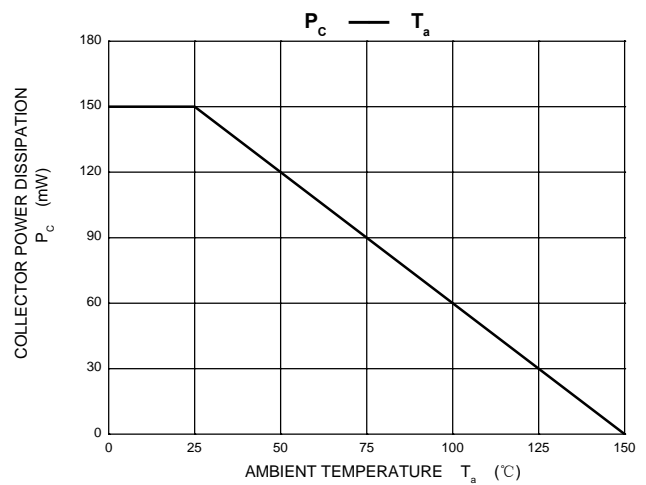
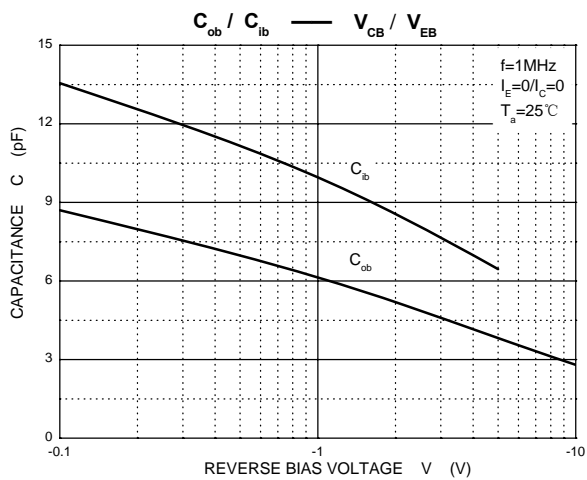
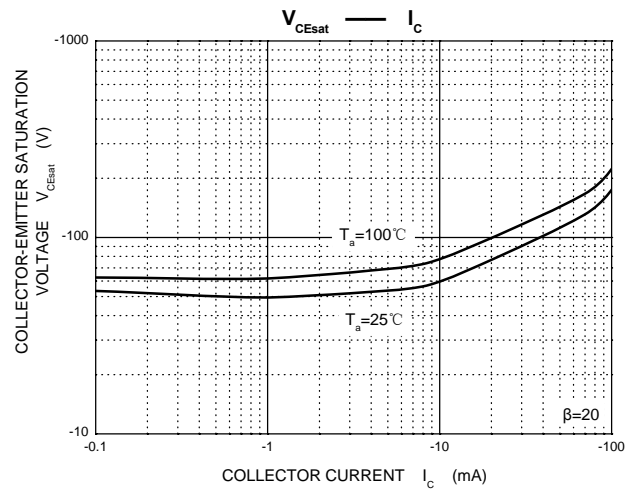
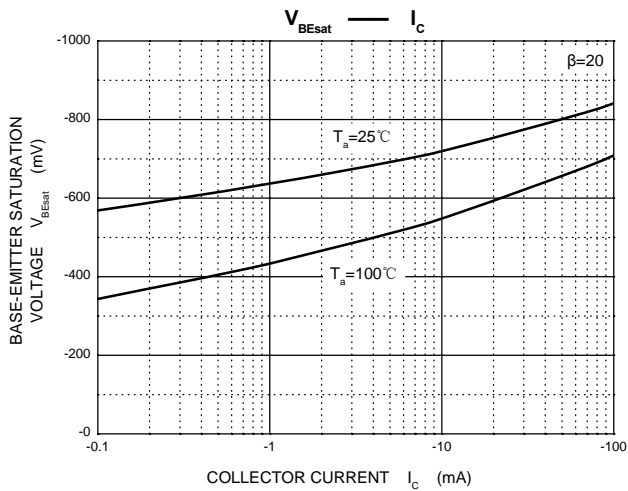
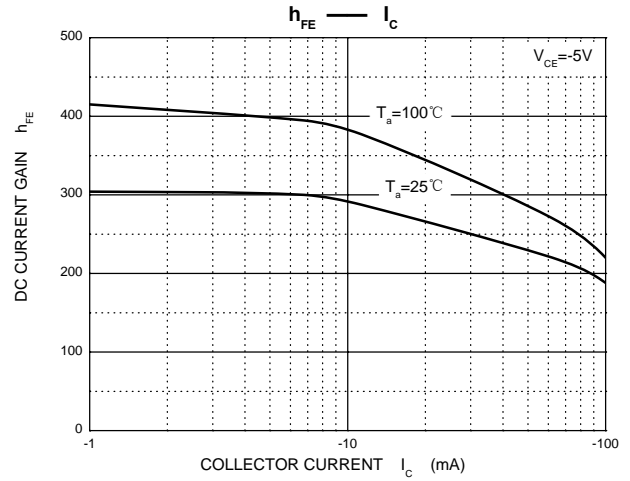
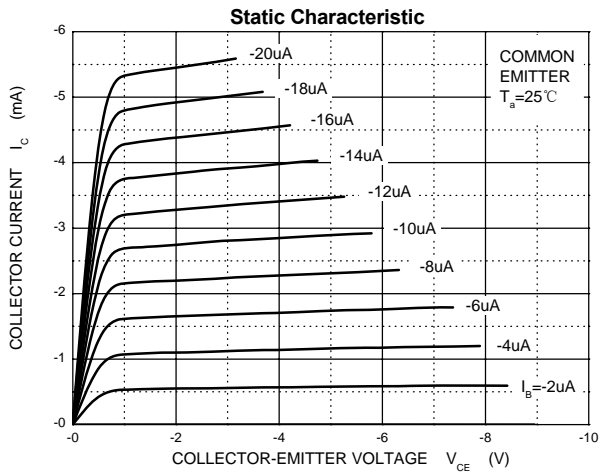
SOT-323



1. BASE
2. EMITTER
3. COLLECTOR

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

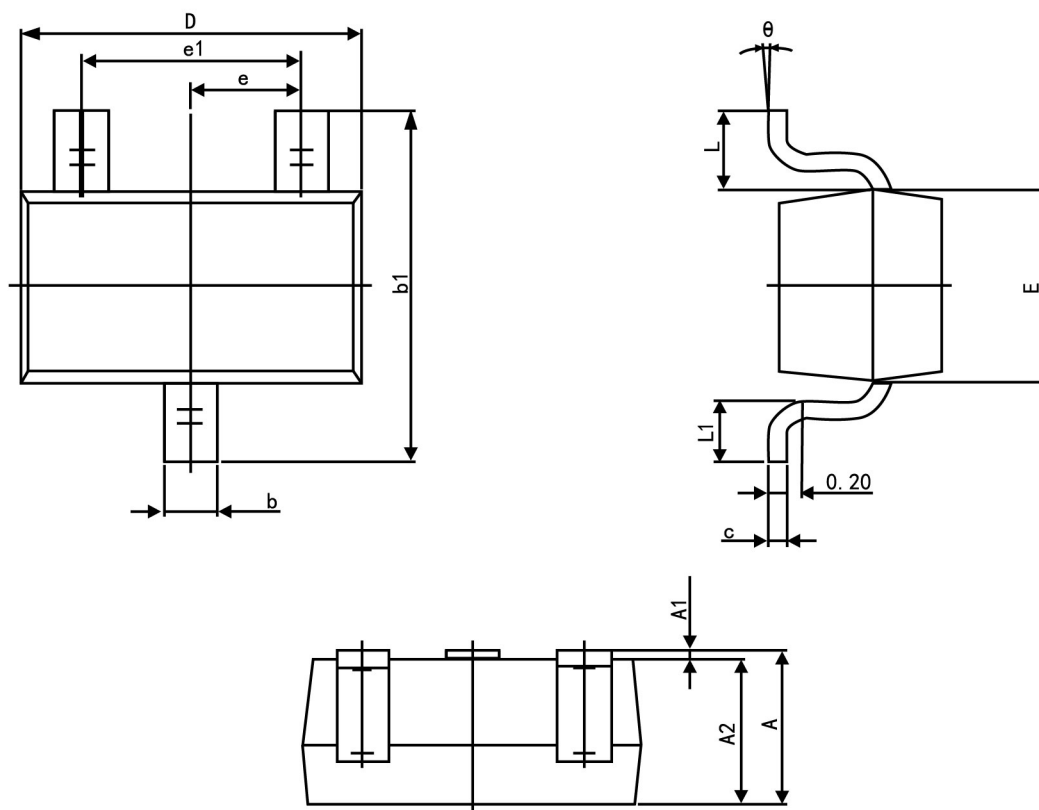
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BC856W BC857W BC858W	V _{CBO}	I _C = -10μA, I _E =0	-80 -50 -30	V
Collector-emitter breakdown voltage	BC856W BC857W BC858W	V _{CEO}	I _C = -10mA, I _B =0	-65 -45 -30	V
Emitter-base breakdown voltage		V _{EBO}	I _E = -1μA, 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



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.200	0.400
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°