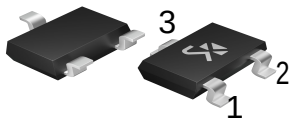
BC856W THRU BC858W

PNP Silicon Epitaxial Planar Transistor

SOT-323



1. BASE
2. EMITTER
3. COLLECTOR

FEATURES：

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

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter		Value	Units
V_{CBO}	Collector-Base Voltage	BC856W BC857W BC858W	-80 -50 -30	V
V_{CEO}	Collector-Emitter Voltage	BC856W BC857W BC858W	-65 -45 -30	V
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current -Continuous		-100	mA
P_C	Collector Power Dissipation		150	mW
T_j	Junction Temperature		150	℃
T_{stg}	Storage Temperature		-65-+150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BC856W BC857W BC858W	$V_{(BR)CBO}$	I_C=-10uA,I_E=0	-80 -50 -30			V
Collector-emitter breakdown voltage	BC856W BC857W BC858W	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-65 -45 -30			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=-1u A, I_C=0	-5			V
Collector cut-off current		I_{CBO}	V_{CB}=-30V, I_E=0			-15	nA
DC current gain	A B C	h_{FE}	V_{CE}=-5V, Ic=- 2mA	125 220 420		250 475 800	
Collector-emitter saturation voltage		V_{CE}(sat)	I_C=-100mA, IB=-5 mA			-0.65	V

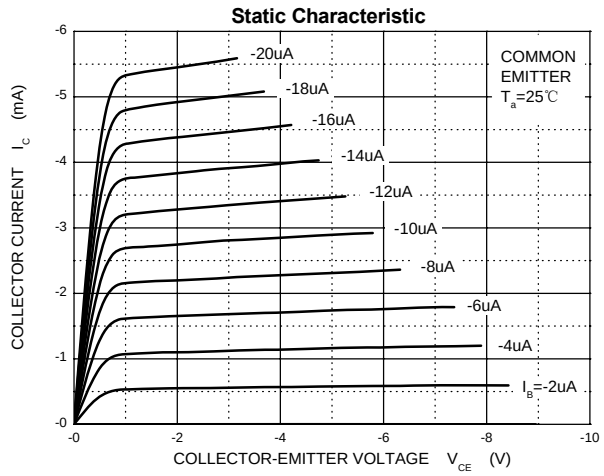
ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

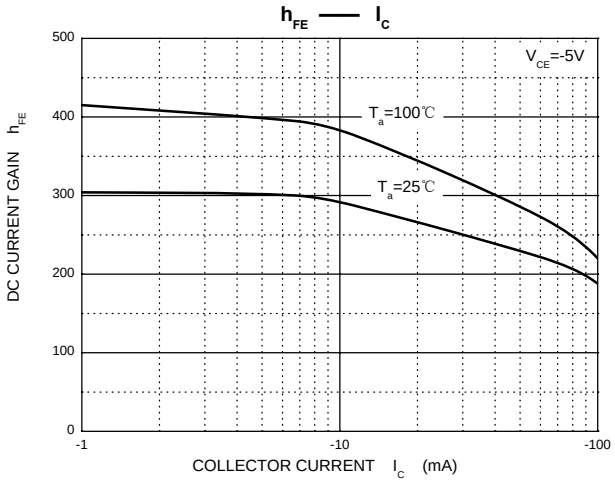
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Transition frequency	f_T	V_{CE}=-5V, I_C= -10mA f=100MHz	100			MHz
Base-emitter saturation voltage	V_{BE}(sat)	I_C=-100mA, IB=-5 mA			-1.1	V
Output capacitance	C_{ob}	V_{CE}=-10V, Ic=0 f=1MHZ			4.5	pF

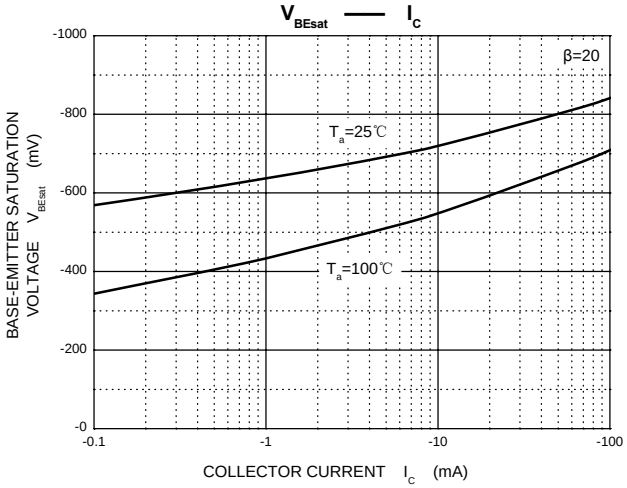
DEVICE MARKING

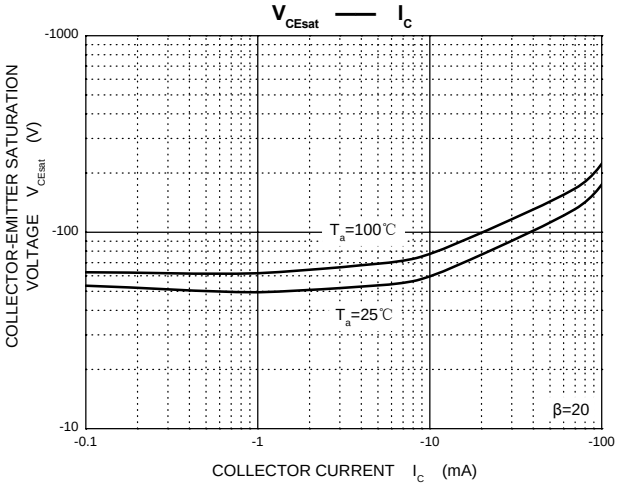
BC856AW=3A; BC856BW=3B;
BC857AW=3E; BC857BW=3F;BC857CW=3G;
BC858AW=3J; BC858BW=3K; BC858CW=3L

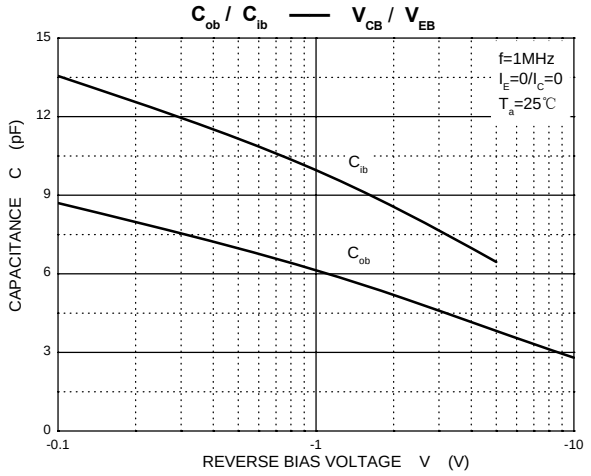
Typical Characteristics

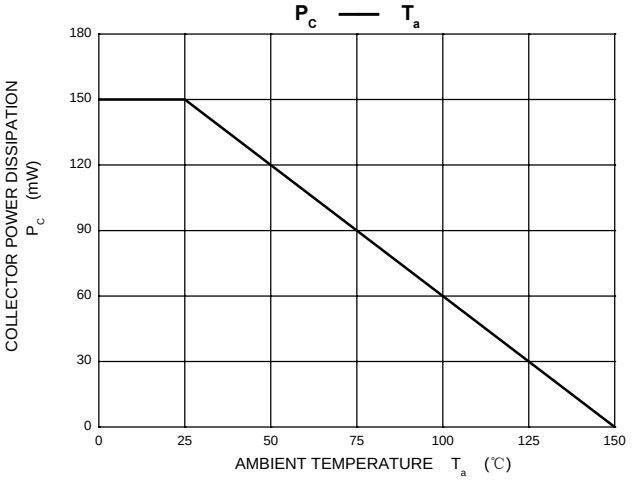




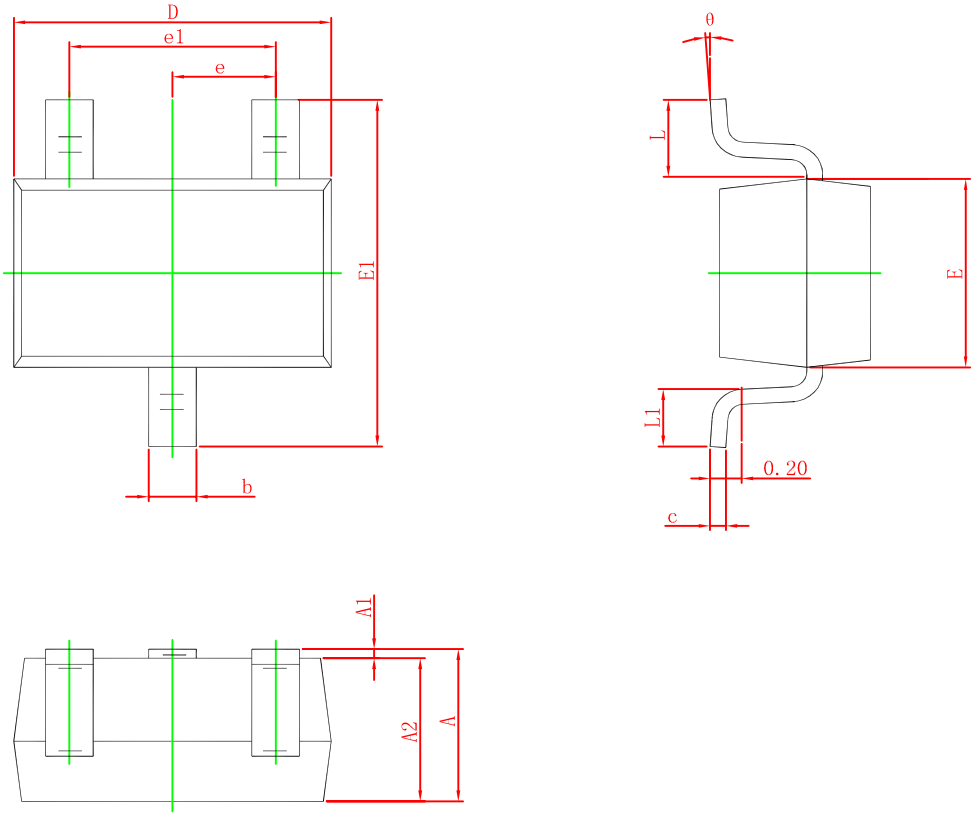








SOT-323 PACKAGE OUTLINE DIMENSIONS



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°