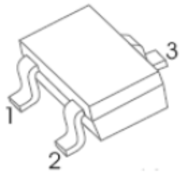
TRANSISTOR (PNP)
BC856W/BC857W/BC858W

FEATURES

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

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
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	-0.1	A
P_{C*}	Collector Power Dissipation	150	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	833	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55～+150	℃



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℃ 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

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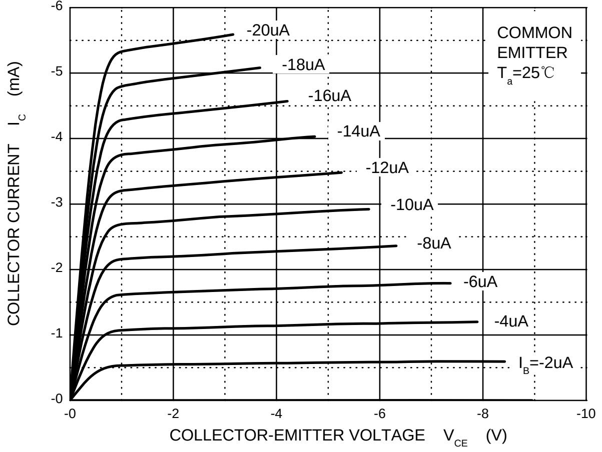
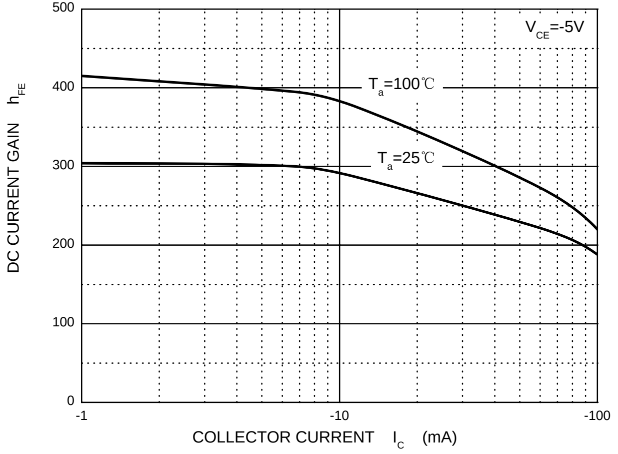
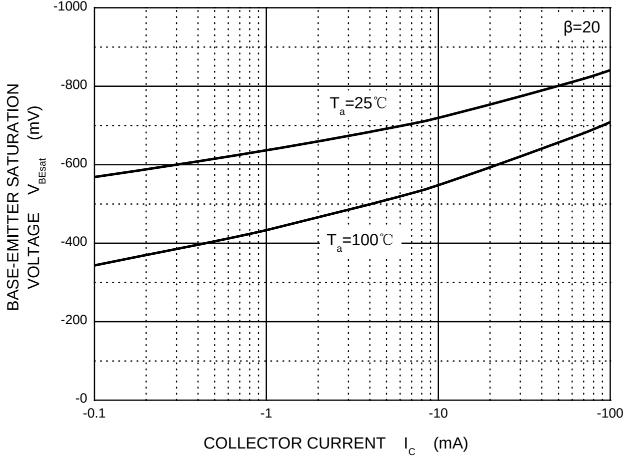
Typical Characteristics



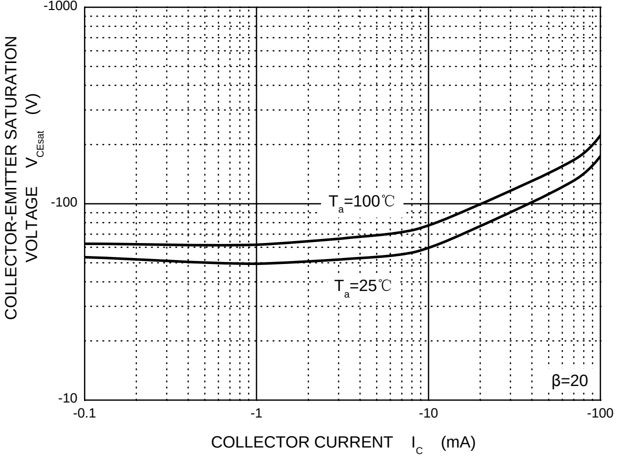
Static Characteristic



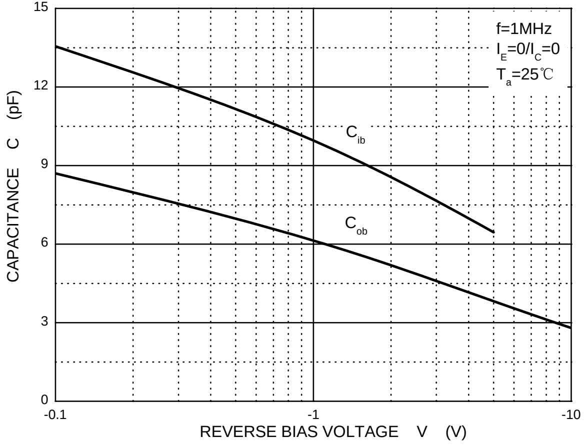
h_{FE} —— I_C



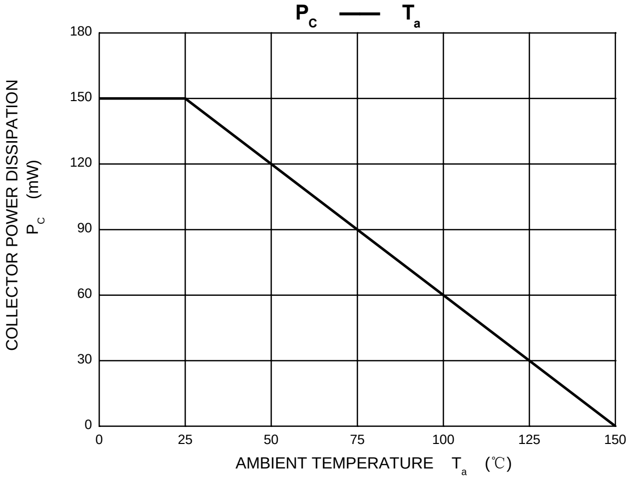
V_{BEsat} —— I_C



V_{CEsat} —— I_C



C_{ob} / C_{ib} —— V_{CB} / V_{EB}



P_C —— T_a

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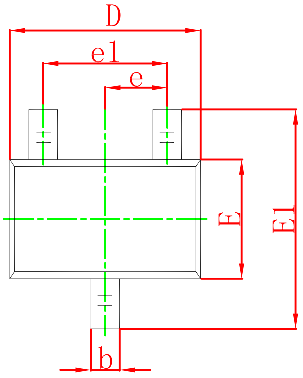
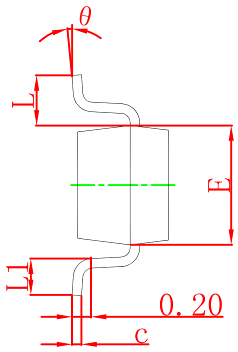
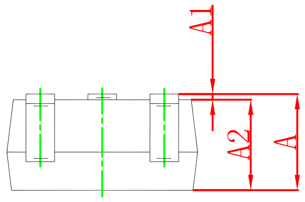
SOT-323 Package Outline Dimensions

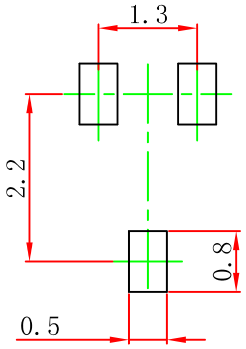






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 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:±0.05mm.
3.The pad layout is for reference purposes only.