BC856
BC857
BC858

TRANSISTOR (PNP)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-23-3

FEATURES

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

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

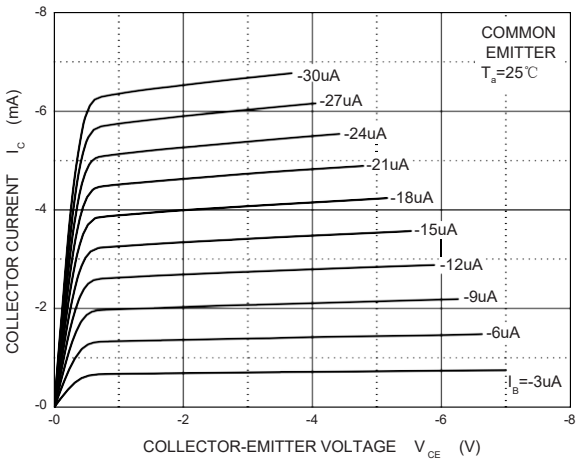
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage		V
	BC856	-80	
	BC857	-50	
	BC858	-30	
V_{CEO}	Collector-Emitter Voltage		V
	BC856	-65	
	BC857	-45	
	BC858	-30	
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	-0.1	A
P_C	Collector Power Dissipation	200	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	625	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55～+150	℃

DEVICE MARKING

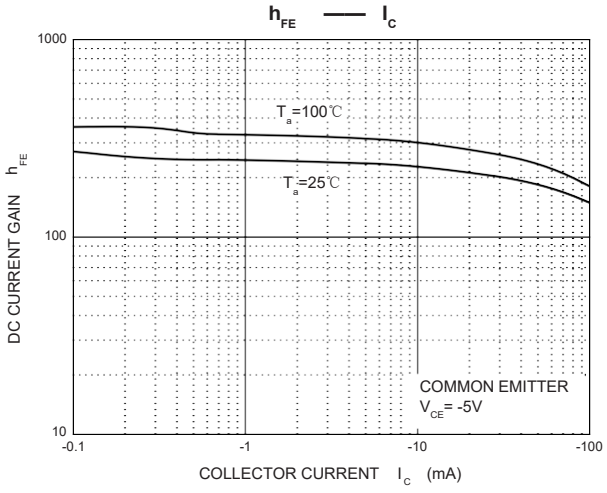
BC856A=3A;BC856B= 3B;
BC857A=3E;BC857B=3F;BC857C=3G;
BC858A=3J; BC858B=3K; BC858C=3L

Parameter		Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	**BC856**	V_{CBO}	I_C= -10μA, I_E=0	-80		V
	BC857			-50		
	BC858			-30		
Collector-emitter breakdown voltage	**BC856**	V_{CEO}	I_C= -10mA, I_B=0	-65		V
	BC857			-45		
	BC858			-30		
Emitter-base breakdown voltage		V_{EBO}	I_E= -1μA, I_C=0	-5		V
Collector cut-off current	**BC856**	I_{CBO}	V_{CB}= -70 V , I_E=0		-0.1	μA
	BC857		V_{CB}= -45 V , I_E=0			
	BC858		V_{CB}= -25 V , I_E=0			
Emitter cut-off current		I_{EBO}	V_{EB}= -5 V , I_C=0		-0.1	μA
DC current gain	**BC856A, 857A,858A**	h_{FE}	V_{CE}= -5V,I_C= -2mA	125	250	
	BC856B, 857B,858B			220	475	
	BC857C,BC858C			420	800	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=-100mA,I_B= -5 mA		-0.5	V
Base-emitter saturation voltage		$V_{BE(sat)}$	I_C= -100mA, I_B= -5mA		-1.1	V
Transition frequency		f_T	V_{CE}= -5 V, I_C= -10mA f=100MHz	100		MHz
Collector capacitance		C_{ob}	V_{CB}=-10V, f=1MHz		4.5	pF

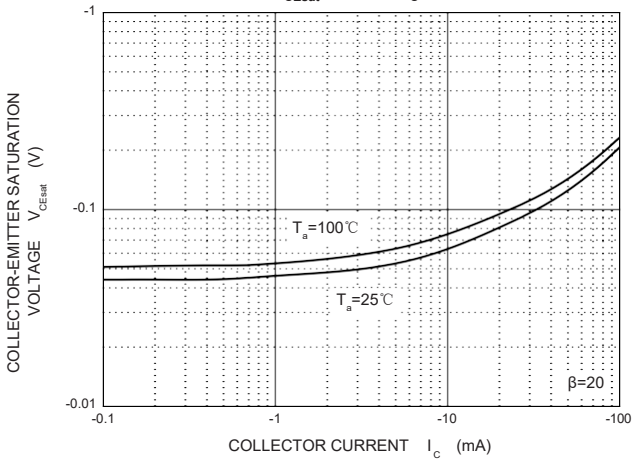
Static Characteristic



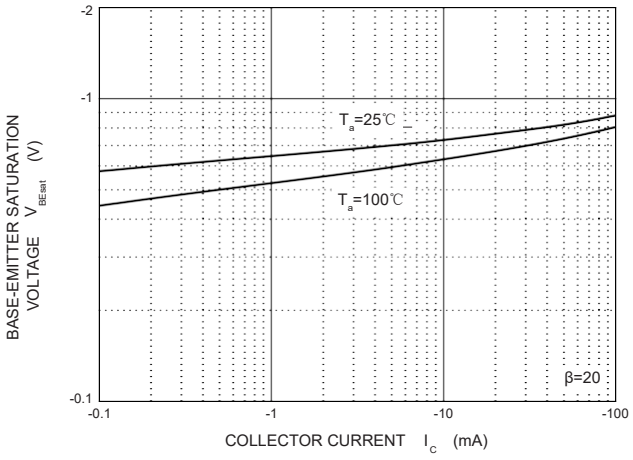
h_{FE} — I_C



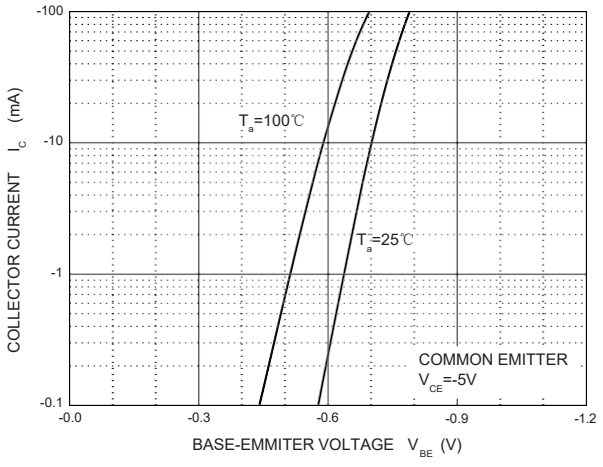
V_{CEsat} — I_C



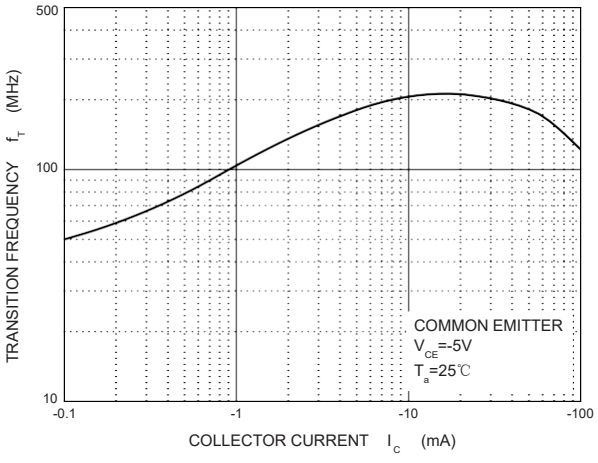
V_{BEsat} — I_C



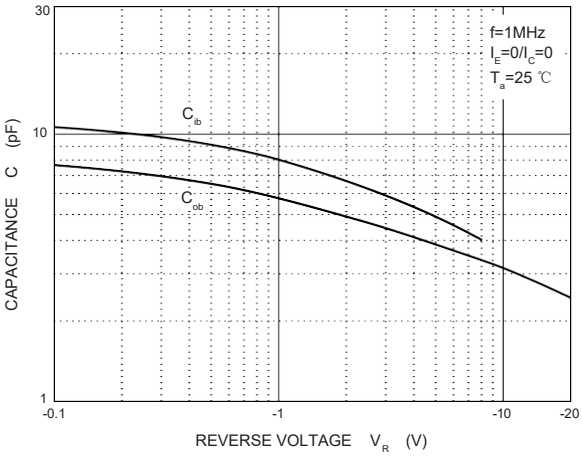
I_C — V_{BE}



f_T — I_C



C_{ob} / C_{ib} — V_{CB} / V_{EB}



P_C — T_a