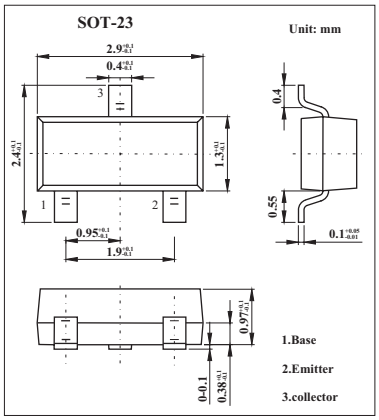
PNP Transistor

BC857B



Features

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

Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
Collector-Base Voltage	BC856	V_{CBO}	-80	V
	BC857		-50	
	BC858		-30	
Collector-Emitter Voltage	BC856	V_{CEO}	-65	V
	BC857		-45	
	BC858		-30	
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current -Continuous		I_C	-0.1	A
Collector Power Dissipation		P_C	200	mW
Junction Temperature		T_J	150	℃
Storage Temperature		T_{stg}	-65 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter		Symbol	Testconditons	Min	Typ	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= -10 mA, I_B=0	-65			V
	BC857			-45			
	BC858			-30			
Emitter-base breakdown voltage		V_{EBO}	I_E= -10μA, 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				
Collector cut-off current	BC856	I_{CEO}	V_{CE}= -60 V , I_B=0			-0.1	μA
	BC857		V_{CE}= -40 V , I_B=0				
	BC858		V_{CE}= -25 V , I_B=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	120		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= -100 mA, I_B= -5mA			-1.1	V
Collector capacitance		C_{ob}	V_{CB}=-10V,f=1MHz			4.5	pF
Transition frequency		f_T	V_{CE}= -5 V, I_C= -10mA,f=100MHz	100			MHz

■ Marking

NO.	BC856A	BC856B
Marking	3A	3B

NO.	BC857A	BC857B	BC857C
Marking	3E	3F	3G

NO.	BC858A	BC858B	BC858C
Marking	3J	3K	3L

■ Typical Characteristics

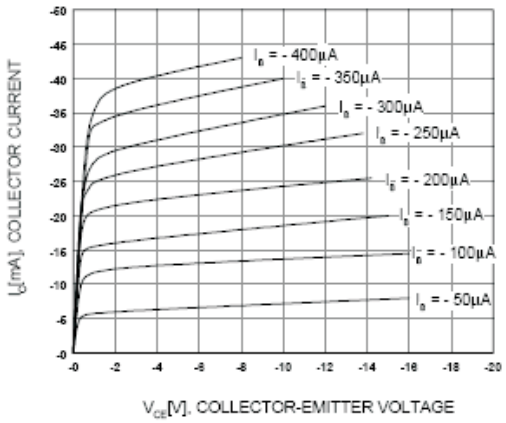


Fig.1 Static Characteristic

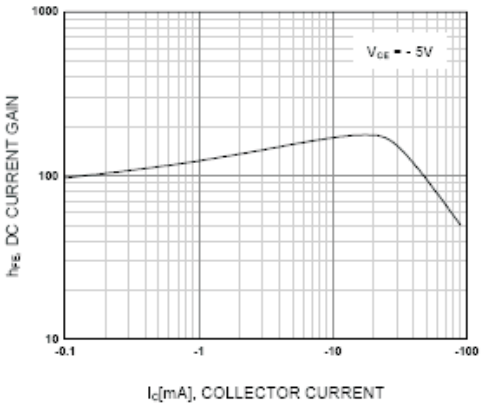


Fig.2 DC Current Gain

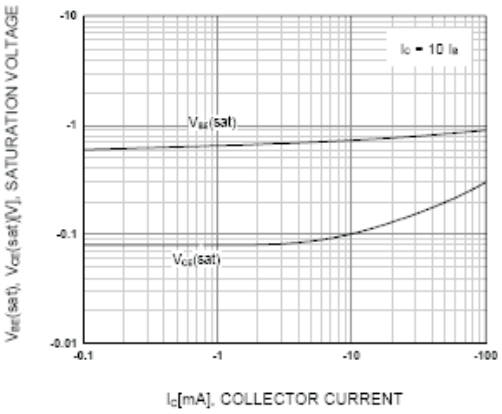


Fig.3 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

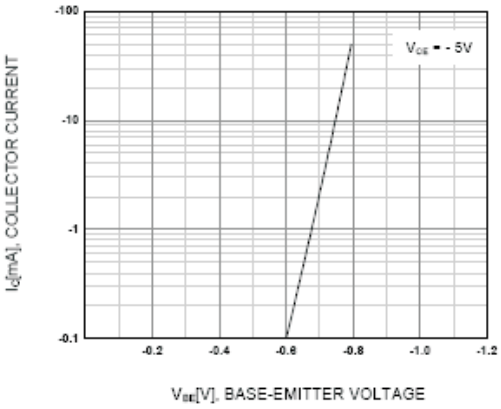


Fig.4 Base Emitter ON Voltage

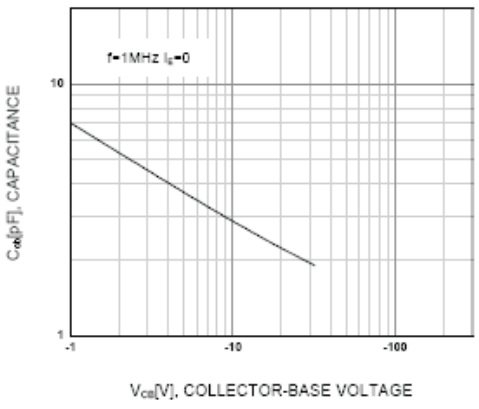


Fig.5 Collector Output Capacitance

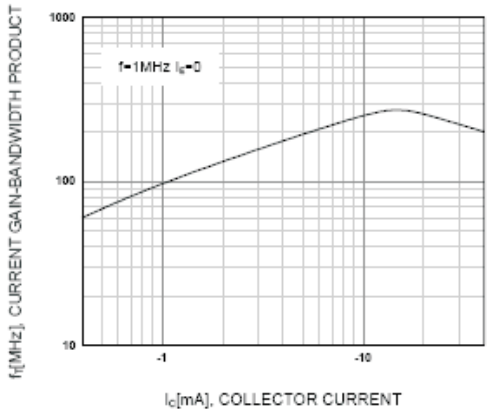


Fig.6 Current Gain Bandwidth Product