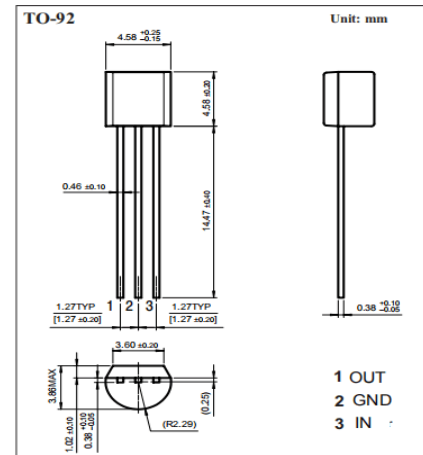


PNP Transistor

BC857B

■ Features

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



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	-80	V
		-50	
		-30	
Collector-Emitter Voltage	V _{CEO}	-65	V
		-45	
		-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	°C
Storage Temperature	T _{stg}	-65 to +150	°C

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC856	$I_c = -10\mu\text{A}, I_E = 0$	-80			V
	BC857		-50			
	BC858		-30			
Collector-emitter breakdown voltage	BC856	$I_c = -10\text{ mA}, I_B = 0$	-65			V
	BC857		-45			
	BC858		-30			
Emitter-base breakdown voltage	V_{EBO}	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	BC856	$V_{CB} = -70\text{ V}, I_E = 0$			-0.1	$\mu\text{ A}$
	BC857	$V_{CB} = -45\text{ V}, I_E = 0$				
	BC858	$V_{CB} = -25\text{ V}, I_E = 0$				
Collector cut-off current	BC856	$V_{CE} = -60\text{ V}, I_B = 0$			-0.1	$\mu\text{ A}$
	BC857	$V_{CE} = -40\text{ V}, I_B = 0$				
	BC858	$V_{CE} = -25\text{ V}, I_B = 0$				
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$			-0.1	$\mu\text{ A}$
DC current gain	BC856A, 857A, 858A	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	120		250	
	BC856B, 857B, 858B		220		475	
	BC857C, BC858C		420		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -5\text{ mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100\text{ mA}, I_B = -5\text{mA}$			-1.1	V
Collector capacitance	C_{ob}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$			4.5	pF
Transition frequency	f_T	$V_{CE} = -5\text{ V}, I_C = -10\text{mA}, f = 100\text{MHz}$	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

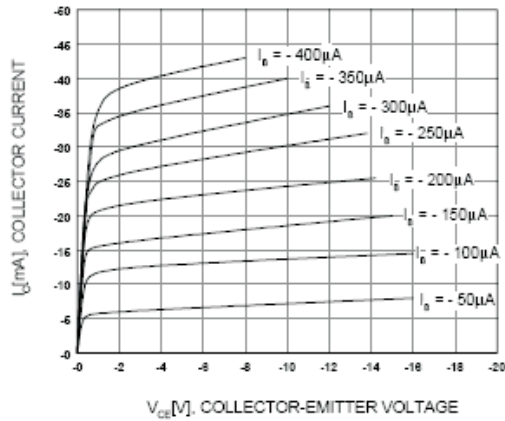


Fig.1 Static Characteristic

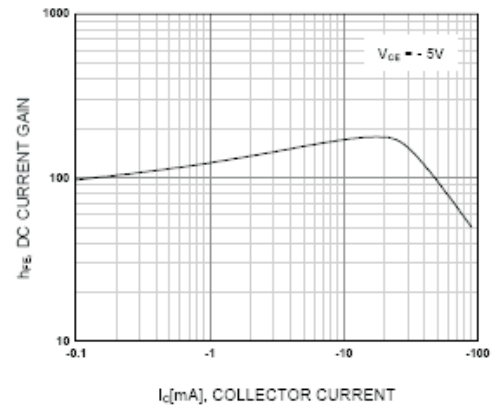


Fig.2 DC Current Gain

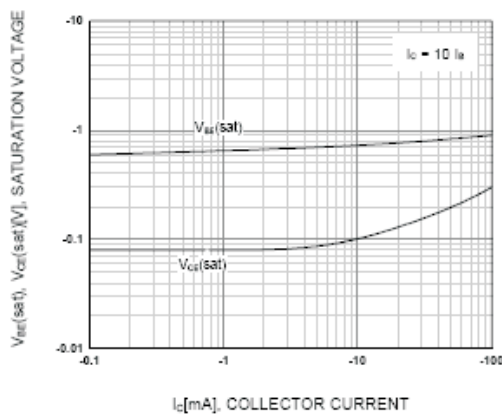
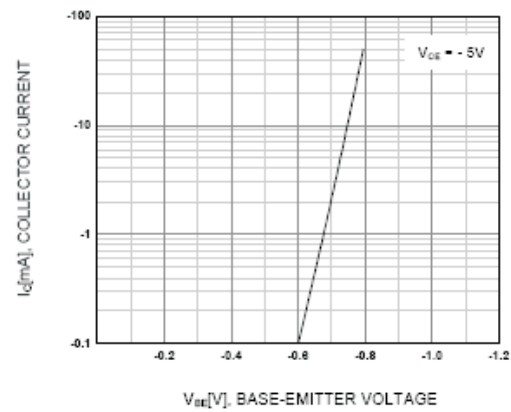
Fig.3 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

Fig.4 Base Emitter ON Voltage

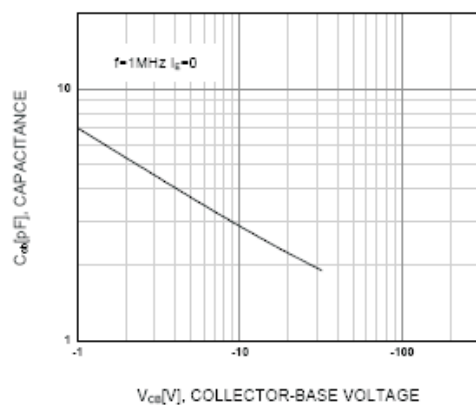


Fig.5 Collector Output Capacitance

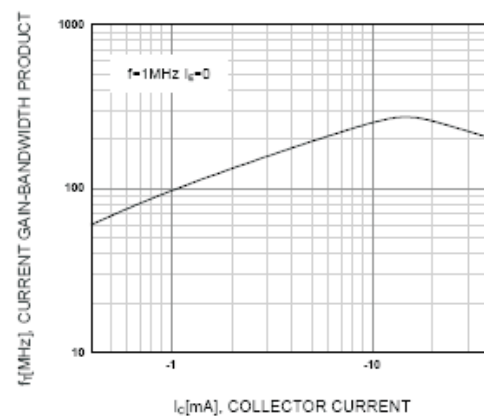


Fig.6 Current Gain Bandwidth Product