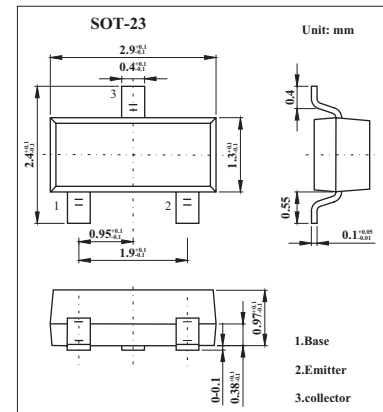


PNP Transistor BC857A

■ Features

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



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	KC856	$I_c = -10\mu\text{A}, I_E = 0$	-80			V
	KC857		-50			
	KC858		-30			
Collector-emitter breakdown voltage	KC856	$I_c = -10\text{ mA}, I_B = 0$	-65			V
	KC857		-45			
	KC858		-30			
Emitter-base breakdown voltage	V_{EB0}	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	KC856	$V_{CB} = -70\text{ V}, I_E = 0$			-0.1	$\mu\text{ A}$
	KC857	$V_{CB} = -45\text{ V}, I_E = 0$				
	KC858	$V_{CB} = -25\text{ V}, I_E = 0$				
Collector cut-off current	KC856	$V_{CE} = -60\text{ V}, I_B = 0$			-0.1	$\mu\text{ A}$
	KC857	$V_{CE} = -40\text{ V}, I_B = 0$				
	KC858	$V_{CE} = -25\text{ V}, I_B = 0$				
Emitter cut-off current	I_{E0}	$V_{EB} = -5\text{ V}, I_C = 0$			-0.1	$\mu\text{ A}$
DC current gain	KC856A, 857A, 858A	$V_{CE} = -5\text{V}, I_c = -2\text{mA}$	120		250	
	KC856B, 857B, 858B		220		475	
	KC857C, KC858C		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.	KC856A	KC856B
Marking	3A	3B

NO.	KC857A	KC857B	KC857C
Marking	3E	3F	3G

NO.	KC858A	KC858B	KC858C
Marking	3J	3K	3L

■ Typical Characteristics

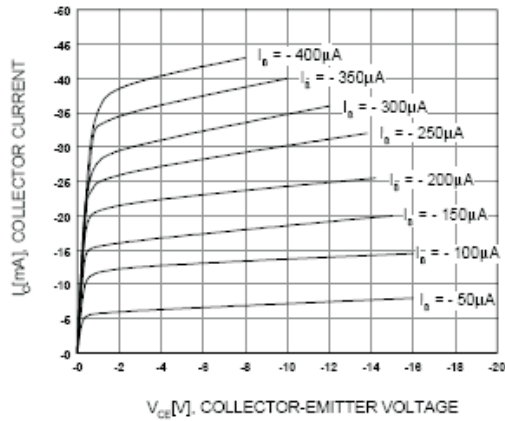


Fig.1 Static Characteristic

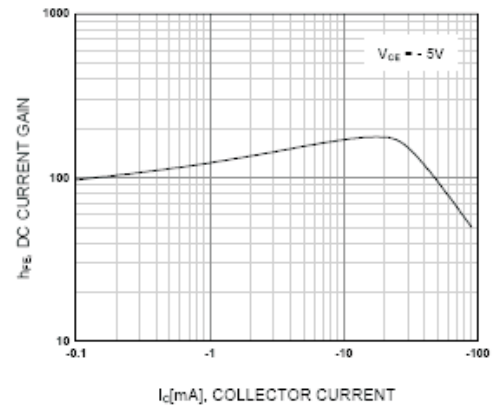


Fig.2 DC Current Gain

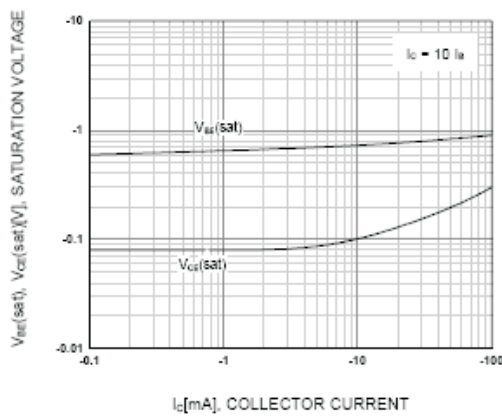


Fig.3 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

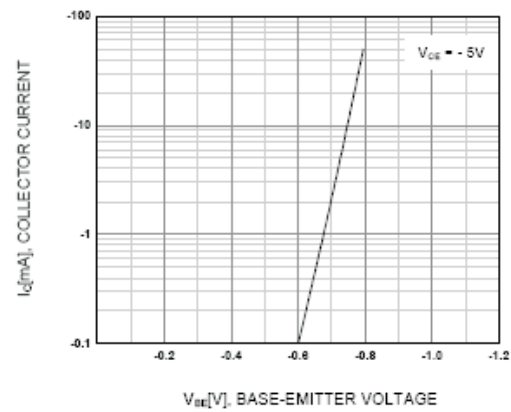


Fig.4 Base Emitter ON Voltage

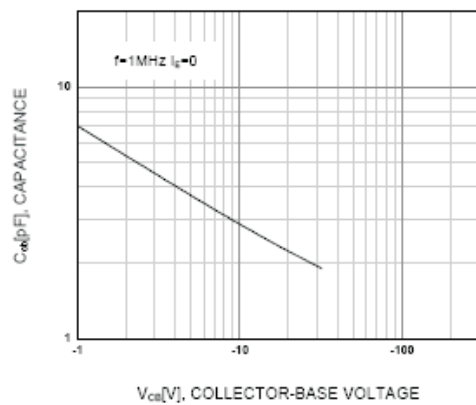


Fig.5 Collector Output Capacitance

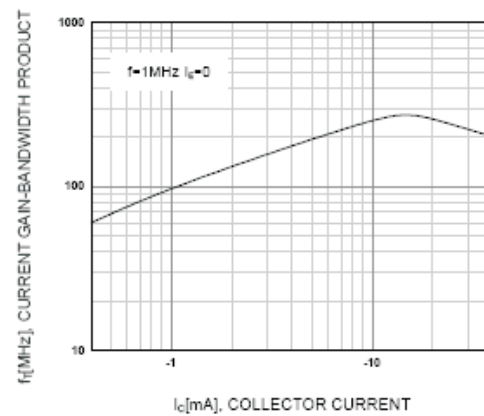


Fig.6 Current Gain Bandwidth Product