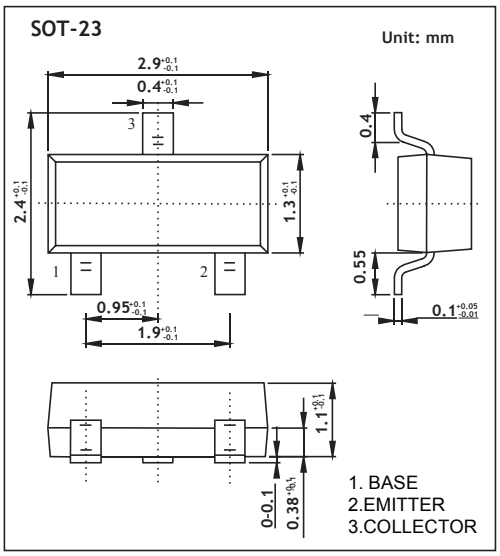
Transistor

PNP Transistors

BC856 ~ BC858



■ Features

- Ideally suited for automatic insertion
- For switching and AF amplifier applications
- Complementary to BC846~BC848

■ 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	
	BC857		-45	
	BC858		-30	
Emitter - Base Voltage		V_{EBO}	-5	
Collector Current - Continuous		I_C	-100	mA
Collector Power Dissipation		P_C	200	mW
Thermal Resistance, junction to Ambient		$R_{\theta JA}$	625	℃/W
Junction Temperature		T_J	150	℃
Storage Temperature		T_{stg}	-65 to 150	

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■ Electrical Characteristics Ta = 25℃

Parameter		Symbol	Testconditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	BC856	V_{CBO}	I_C= -10 μA， I_E=0	-80			V
	BC857			-50			
	BC858			-30			
Collector- emitter breakdown voltage	BC856	V_{CEO}	I_C= -10 mA， I_B=0	-65			
	BC857			-45			
	BC858			-30			
Emitter - base breakdown voltage		V_{EBO}	I_E= -1 μA， I_C=0	-5			
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	
	BC857		V_{CE}= -40 V , I_B=0				
	BC858		V_{CE}= -25 V , I_B=0				
Emitter cut-off current		I_{EBO}	V_{EB}= -5V , I_C=0			-0.1	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=-100 mA, I_B= -5mA			-0.5	V
Base - emitter saturation voltage		$V_{BE(sat)}$	I_C=-100 mA, I_B= -5mA			-1.1	
DC current gain	BC856A,857A,858A	h_{FE}	V_{CE}= -5V, I_C= -2mA	125		250	
	BC856B,857B,858B			220		475	
	BC857C,858C			420		800	
Collecter capactiance		C_{ob}	V_{CB}=-10V ,f=1MHz			4.5	pF
Transition frequency		f_T	V_{CE}=-5V, I_C=-10mA,f=100MHz	100			MHz

■ Classification of hFE

Rank	BC856A	BC856B
Range	125-250	220-475
Marking	3A	3B

Rank	BC847A	BC847B	BC847C
Range	125-250	220-475	420-800
Marking	3E	3F	3G

Rank	BC848A	BC848B	BC848C
Range	125-250	220-475	420-800
Marking	3J	3K	3L

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■ Typical Characterisitics