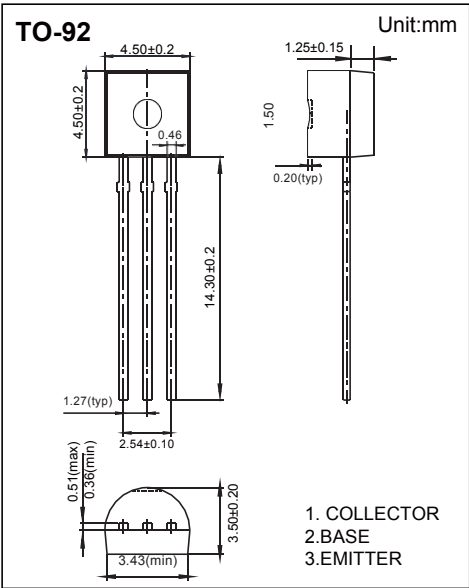


Transistor

NPN Transistors BC546~BC548

■ Features

- High Voltage
- Complement to BC556,BC557,BC558



■ Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
Collector - Base Voltage	BC546	V _{CB0}	80	V
	BC547		50	
	BC548		30	
Collector - Emitter Voltage	BC546	V _{CEO}	65	
	BC547		45	
	BC548		30	
Emitter - Base Voltage	BC546	V _{EBO}	6	
	BC547		6	
	BC548		5	
Collector Current - Continuous		I _C	0.1	A
Collector Power Dissipation		P _C	625	mW
Thermal Resistance from Junction to Ambient		R _{θJA}	200	℃/W
Junction Temperature		T _J	150	℃
Storage Temperature		T _{stg}	-55 to 150	

Transistor

NPN Transistors

BC546~BC548

■ Electrical Characteristics Ta = 25℃

Parameter		Symbol	Testconditons	Min	Typ	Max	Unit		
Collecto- base breakdown voltage	BC546	V _{CB0}	I _c = 100 μA, I _E =0	80			V		
	BC547			50					
	BC548			30					
Collector- emitter breakdown voltage	BC546	V _{CEO}	I _c = 1 mA, I _B =0	65					
	BC547			45					
	BC548			30					
Emitter - base breakdown voltage	BC546	V _{EB0}	I _E = 10 μA, I _C =0	6					
	BC547			6					
	BC548			5					
Collector cut-off current	BC546	I _{CB0}	V _{CB} = 70 V , I _E =0			0.1	μA		
	BC547		V _{CB} = 50 V , I _E =0						
	BC548		V _{CB} = 30 V , I _E =0						
Collector cut-off current	BC546	I _{CEO}	V _{CE} = 60 V , I _B =0			0.1			
	BC547		V _{CE} = 45 V , I _B =0						
	BC548		V _{CE} = 30 V , I _B =0						
Emitter cut-off current		I _{EB0}	V _{EB} = 5V , I _c =0			0.1			
Collector-emitter saturation voltage		V _{CE(sat)}	I _c =100 mA, I _B = 5mA			0.3			V
Base - emitter saturation voltage		V _{BE(sat)}	I _c =100 mA, I _B = 5mA			1.1			
Base-emitter voltage	V _{BE}	V _{CE} =5V, I _c =2mA	0.58		0.7				
		V _{CE} =5V, I _c =10mA			0.75				
DC current gain		h _{FE}	V _{CE} = 5V, I _c = 2mA	110		800			
Collector output capacitance		C _{ob}	V _{CB} =10V,I _E =0, f=1MHz			4.5	pF		
Transition frequency		f _r	V _{CE} = 5V, I _c = 10mA,f=100MHz	150			MHz		

■ Classification of hFE

Rank	A	B	C
Range	110-220	200-450	420-800