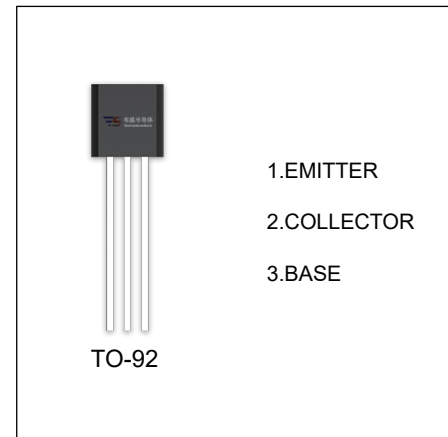


BC556 / BC557 / BC558 TRANSISTOR (PNP)

FEATURES

- High Voltage
- Complement to BC546,BC547,BC548



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
BC556	TO-92	Bulk	1000pcs/Bag
BC556-TA	TO-92	Tape	2000pcs/Box
BC557	TO-92	Bulk	1000pcs/Bag
BC557-TA	TO-92	Tape	2000pcs/Box
BC558	TO-92	Bulk	1000pcs/Bag
BC558-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	BC556	-80
		BC557	-50
		BC558	-30
V_{CEO}	Collector-Emitter Voltage	BC556	-65
		BC557	-45
		BC558	-30
V_{EBO}	Emitter-Base Voltage	-5	V
I_{C}	Collector Current-Continuous	-0.1	A
P_{C}	Collector Power Dissipation	625	mW
$R_{\theta\text{JA}}$	Thermal Resistance from Junction to Ambient	200	$^{\circ}\text{C}/\text{W}$
$T_{\text{J}}, T_{\text{stg}}$	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

$T_a=25^\circ\text{C}$ unless otherwise specified

Parameter		Symbol	Test conditions	Min	Typ	Max	Unit	
Collector-base breakdown voltage	BC556	$V_{(BR)CBO}$	$I_C=-0.1\text{mA}, I_E=0$	-80			V	
	BC557			-50				
	BC558			-30				
Collector-emitter breakdown voltage	BC556	$V_{(BR)CEO}$	$I_C=-2\text{mA}, I_B=0$	-65			V	
	BC557			-45				
	BC558			-30				
Emitter-base breakdown voltage		$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V	
Collector cut-off current	BC556	I_{CBO}	$V_{CB}=-70\text{V}, I_E=0$			-0.1	μA	
	BC557			$V_{CB}=-45\text{V}, I_E=0$			-0.1	μA
	BC558			$V_{CB}=-25\text{V}, I_E=0$			-0.1	μA
Collector cut-off current	BC556	I_{CEO}	$V_{CE}=-60\text{V}, I_B=0$			-0.1	μA	
	BC557			$V_{CE}=-40\text{V}, I_B=0$			-0.1	μA
	BC558			$V_{CE}=-25\text{V}, I_B=0$			-0.1	μA
Emitter cut-off current		I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-0.1	μA	
DC current gain		h_{FE}^*	$V_{CE}=-5\text{V}, I_C=-2\text{mA}$	120		800		
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$			-0.3	V	
			$I_C=-100\text{mA}, I_B=-5\text{mA}$			-0.65	V	
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$			-0.8	V	
			$I_C=-100\text{mA}, I_B=-5\text{mA}$			-1	V	
Base-emitter voltage		V_{BE}	$V_{CE}=-5\text{V}, I_C=-2\text{mA}$	-0.55		-0.7	V	
			$V_{CE}=-5\text{V}, I_C=-10\text{mA}$			-0.82	V	
Collector output capacitance		C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			6	pF	
Transition frequency	BC556	f_T	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$		150		MHz	
	BC557				150		MHz	
	BC558				150		MHz	

CLASSIFICATION of h_{FE}

RANK	A	B	C
RANGE	120-220	180-460	420-800