



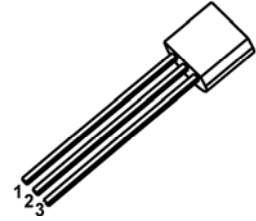
TO-92 Plastic-Encapsulate Transistors

BC556/BC557/BC558 TRANSISTOR (PNP)

FEATURES

- High Voltage
- Complement to BC546,BC547,BC548

TO - 92



- 1. COLLECTOR
- 2. BASE
- 3. EMITTER

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
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC556	V _{(BR)CBO}	I _C = -0.1mA, I _E =0	-80			V
	BC557			-50			
	BC558			-30			
Collector-emitter breakdown voltage	BC556	V _{(BR)CEO}	I _C =-2mA, I _B =0	-65			V
	BC557			-45			
	BC558			-30			
Emitter-base breakdown voltage		V _{(BR)EBO}	I _E =-100μA, I _C =0	-5			V
Collector cut-off current	BC556	I _{CBO}	V _{CB} =-70V, I _E =0			-0.1	μA
	BC557		V _{CB} =-45V, I _E =0			-0.1	μA
	BC558		V _{CB} =-25V, I _E =0			-0.1	μA
Collector cut-off current	BC556	I _{CEO}	V _{CE} =-60V, I _B =0			-0.1	μA
	BC557		V _{CE} =-40V, I _B =0			-0.1	μA
	BC558		V _{CE} =-25V, I _B =0			-0.1	μA
Emitter cut-off current		I _{EBO}	V _{EB} =-5V, I _C =0			-0.1	μA
DC current gain		h _{FE}	V _{CE} =-5V, I _C =-2mA	120		800	
Collector-emitter saturation voltage		V _{CE(sat)}	I _C =-10mA, I _B =-0.5mA			-0.3	V
			I _C =-100mA, I _B =-5mA			-0.65	V
Base-emitter saturation voltage		V _{BE(sat)}	I _C =-10mA, I _B =-0.5mA			-0.8	V
			I _C =-100mA, I _B =-5mA			-1	V
Base-emitter voltage		V _{BE}	V _{CE} =-5V, I _C =-2mA	-0.55		-0.7	V
			V _{CE} =-5V, I _C =-10mA			-0.82	V
Collector output capacitance		C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6	pF
Transition frequency	BC556	f _T	V _{CE} =-5V, I _C =-10mA, f=100MHz		150		MHz
	BC557				150		MHz
	BC558				150		MHz

CLASSIFICATION of h_{FE}

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