

TO-92 Plastic-Encapsulate Transistors

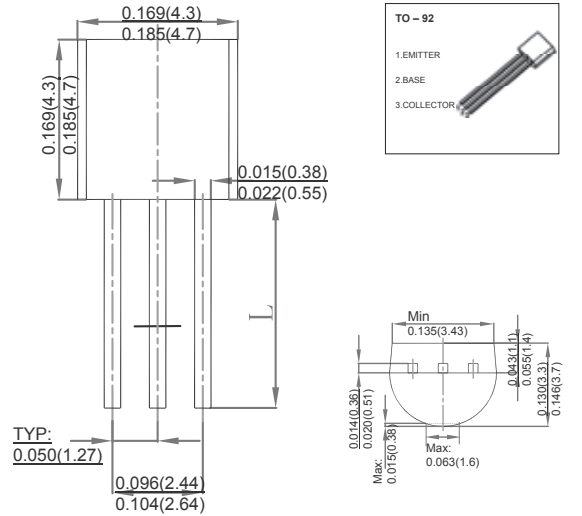
FEATURES

- High Voltage
- Complement to BC546,BC547,BC548
- TRANSISTOR (PNP)

MECHANICAL DATA

- Case style:TO-92molded plastic
- Mounting position:any

TO-92



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (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	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC556	$I_C = -0.1mA, I_E = 0$	-80			V
	BC557		-50			
	BC558		-30			
Collector-emitter breakdown voltage	BC556	$I_C = -2mA, I_B = 0$	-65			V
	BC557		-45			
	BC558		-30			
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-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