

## TO-92 Plastic-Encapsulate Transistors

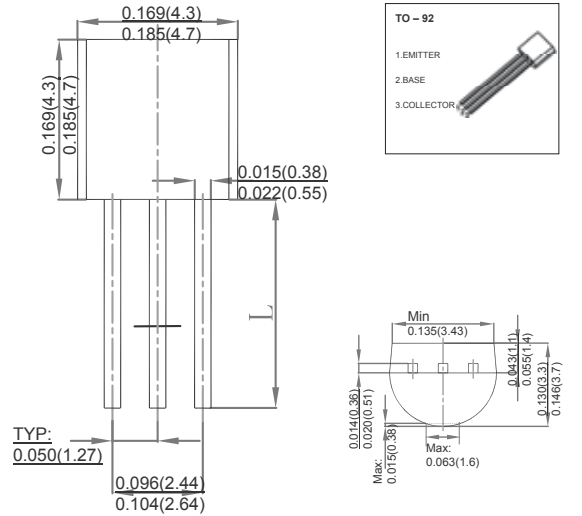
### FEATURES

- 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	$V_{(BR)CBO}$	$I_C = -0.1mA, I_E = 0$	-80			V
			-50			
			-30			
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -2mA, I_B = 0$	-65			V
			-45			
			-30			
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -70V, I_E = 0$			-0.1	$\mu A$
		$V_{CB} = -45V, I_E = 0$			-0.1	$\mu A$
		$V_{CB} = -25V, I_E = 0$			-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -60V, I_B = 0$			-0.1	$\mu A$
		$V_{CE} = -40V, I_B = 0$			-0.1	$\mu A$
		$V_{CE} = -25V, I_B = 0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$			-0.1	$\mu A$
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	$f_T$	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$		150		MHz
				150		MHz
				150		MHz

### CLASSIFICATION of $h_{FE}$

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