

## TO-92 Plastic-Encapsulate Transistors

### BC556/BC557/BC558 TRANSISTOR (PNP)

#### FEATURES

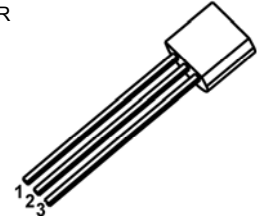
- High Voltage
- Complement to BC546/BC547/BC548

#### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	BC556 -80	V
		BC557 -50	
		BC558 -30	
V <sub>CEO</sub>	Collector-Emitter Voltage	-65	V
		-45	
		-30	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-100	mA
P <sub>C</sub>	Collector Power Dissipation	625	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C

#### TO-92

1. COLLECTOR
2. BASE
3. EMITTER



#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC556 BC557 BC558 V <sub>CBO</sub>	I <sub>C</sub> = -100μA, I <sub>E</sub> =0	-80 -50 -30			V
Collector-emitter breakdown voltage	BC556 BC557 BC558 V <sub>CEO</sub>	I <sub>C</sub> = -2mA, I <sub>B</sub> =0	-65 -45 -30			V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100μA, I <sub>C</sub> =0	-5			V
Collector cut-off current	BC556 BC557 BC558 I <sub>CBO</sub>	V <sub>CB</sub> = -70 V, I <sub>E</sub> =0 V <sub>CB</sub> = -45 V, I <sub>E</sub> =0 V <sub>CB</sub> = -25V, I <sub>E</sub> =0			-0.1	μA
Collector cut-off current	BC556 BC557 BC558 I <sub>CEO</sub>	V <sub>CE</sub> = -60 V, I <sub>B</sub> =0 V <sub>CE</sub> = -40 V, I <sub>B</sub> =0 V <sub>CE</sub> = -25 V, I <sub>B</sub> =0			-0.1	μA
Emitter cut-off current	BC556 BC557 BC558 I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> =0			-0.1	μA
DC current gain	BC556 BC557 BC558 BC557A BC556B/BC557B/BC558B BC557C h <sub>FE</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA	120 120 120 120 180 420		800 800 800 220 460 800	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA			-0.65	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA f = 100MHz	150			MHz

# Typical Characteristics

# BC557

