



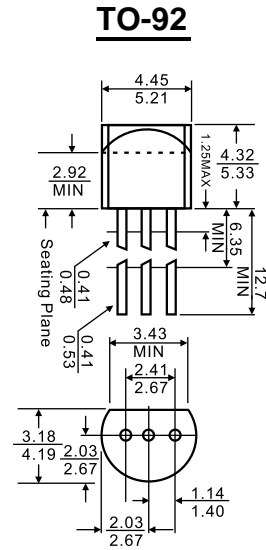
1. COLLECTOR
2. BASE
3. EMITTER

### Features

- ◇ High Voltage
- ◇ Complement to BC546/BC547/BC548

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

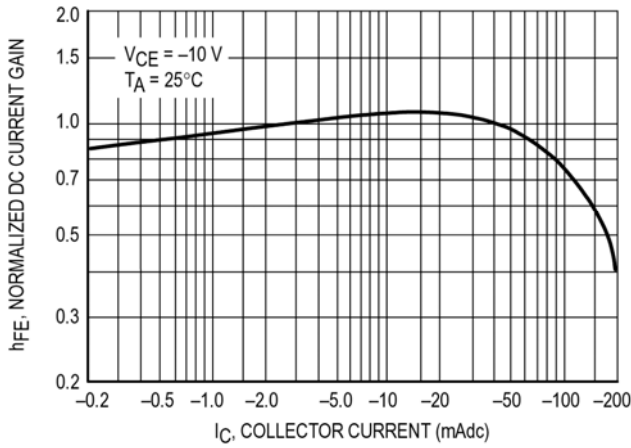
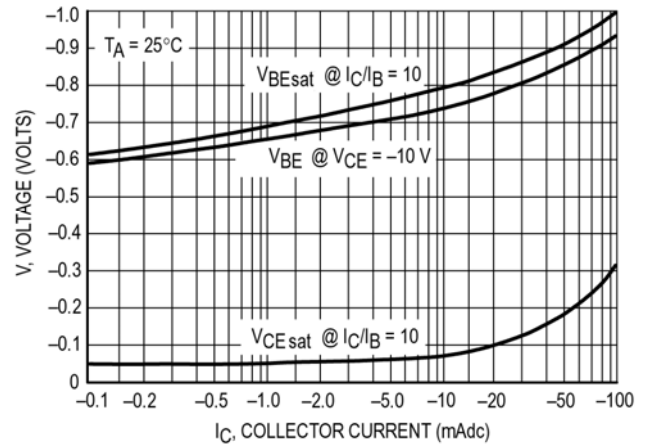
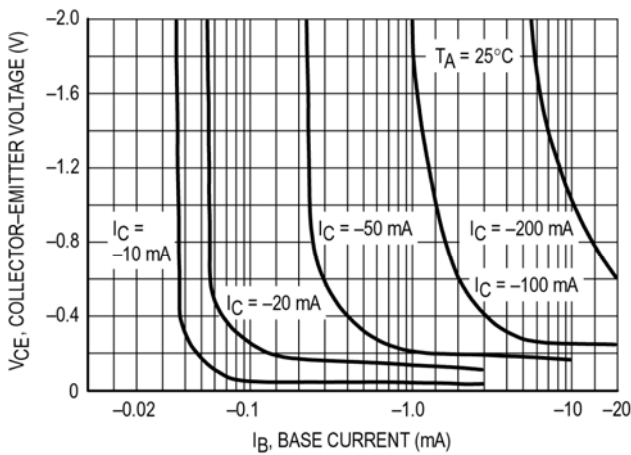
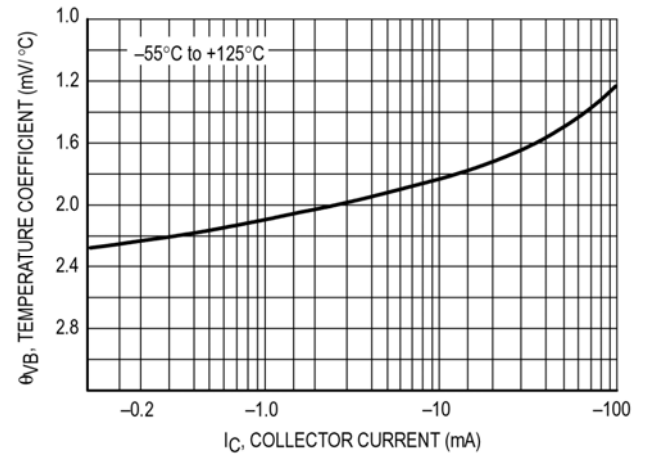
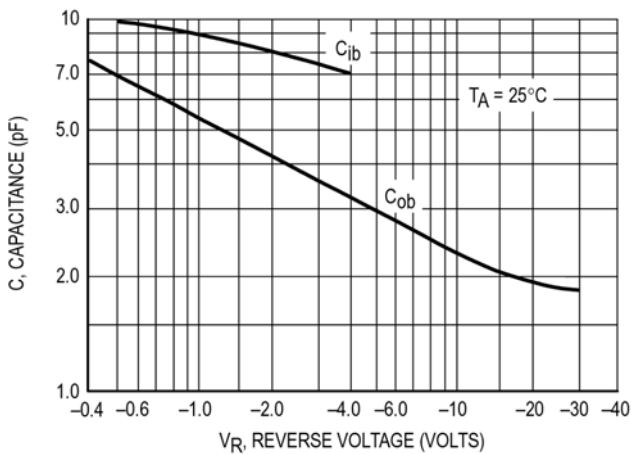
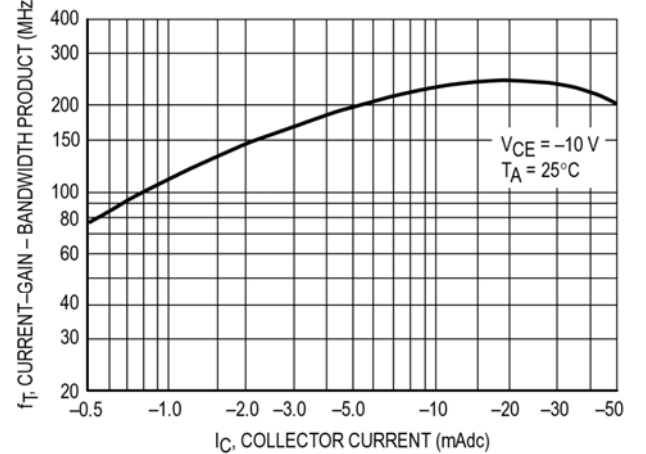
Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage BC556	-80	V
	BC557	-50	
	BC558	-30	
V <sub>CEO</sub>	Collector-Emitter Voltage	-65	V
		-45	
		-30	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-100	mA
P <sub>C</sub>	Collector Power Dissipation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



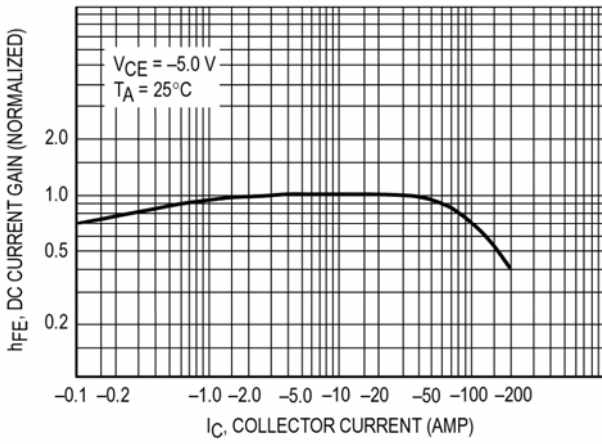
Dimensions in inches and (millimeters)

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

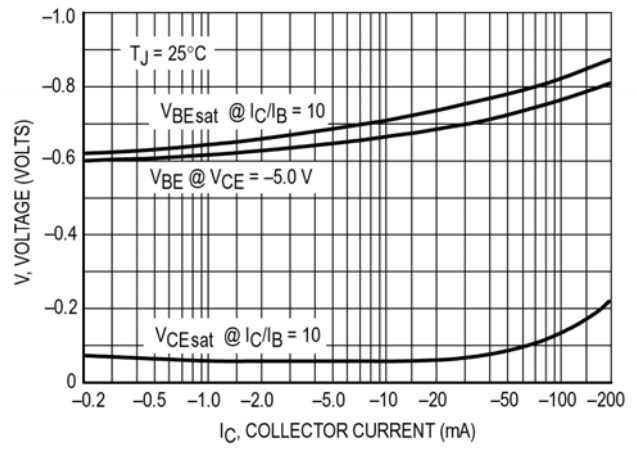
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = -100μA, I <sub>E</sub> =0	BC556	-80		V
			BC557	-50		
			BC558	-30		
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -2mA, I <sub>B</sub> =0	BC556	-65		V
			BC557	-45		
			BC558	-30		
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100μA, I <sub>C</sub> =0	-5		V	
Collector cut-off current	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
			BC556			
			BC557 BC558			
Collector cut-off current	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
			BC556			
			BC557 BC558			
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> =0			-0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> = -2mA	BC556	120	800	
			BC557	120	800	
			BC558	120	800	
			BC557A	120	220	
			BC556B/BC557B/BC558B	180	460	
			BC557C	420	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/BC558**

**Normalized DC Current Gain**

**"Saturation" and "On" Voltages**

**Collector Saturation Region**

**Base-Emitter Temperature Coefficient**

**Capacitances**

**Current-Gain - Bandwidth Product**

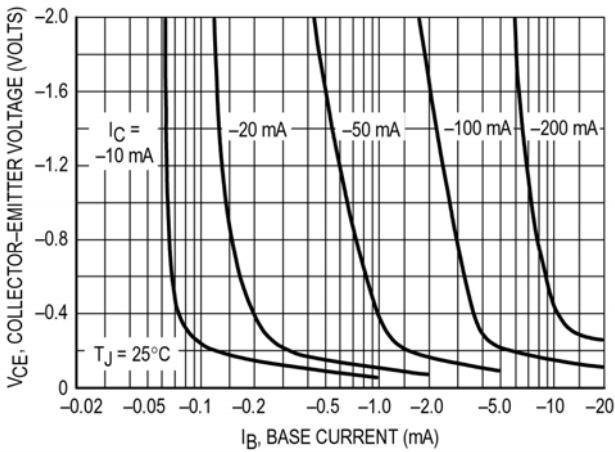
### BC556



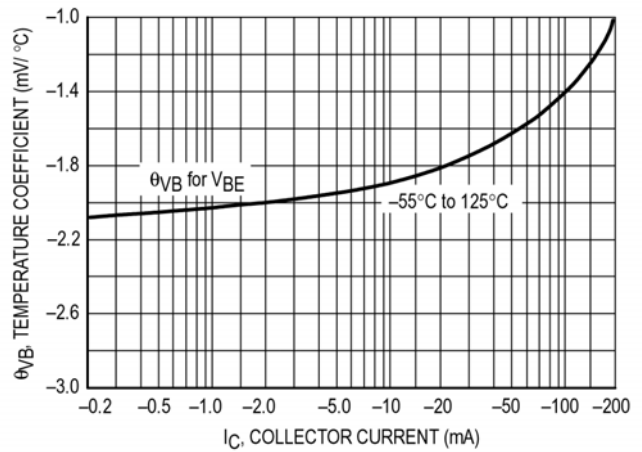
**DC Current Gain**



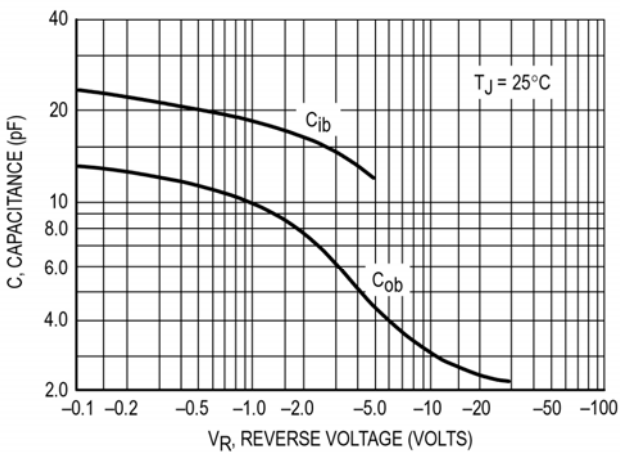
**"On" Voltage**



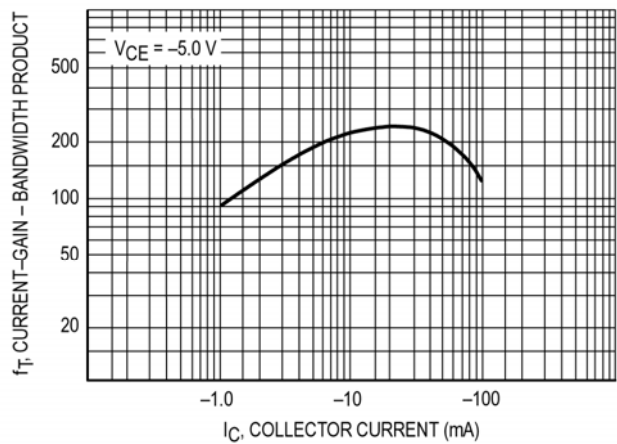
**Collector Saturation Region**



**Base-Emitter Temperature Coefficient**

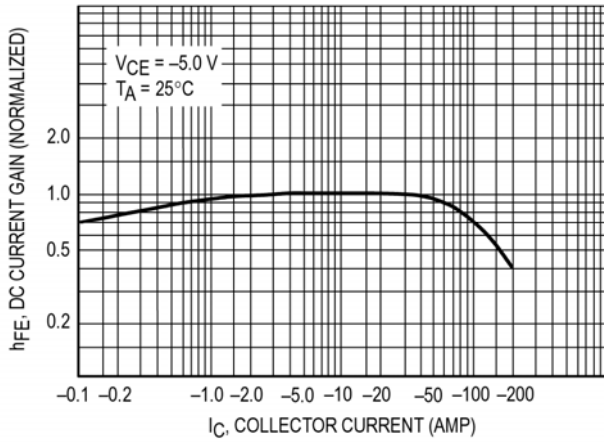


**Capacitance**

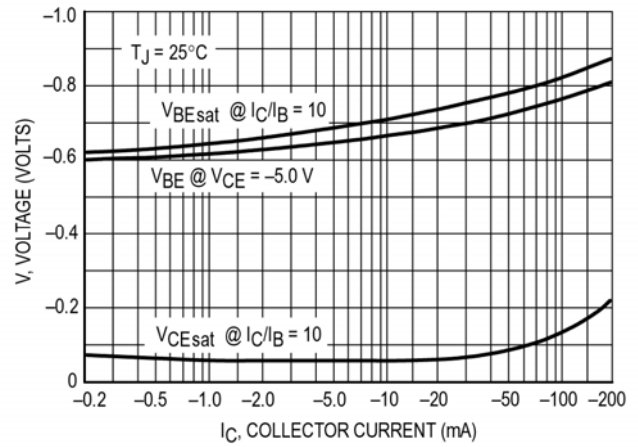


**Current-Gain - Bandwidth Product**

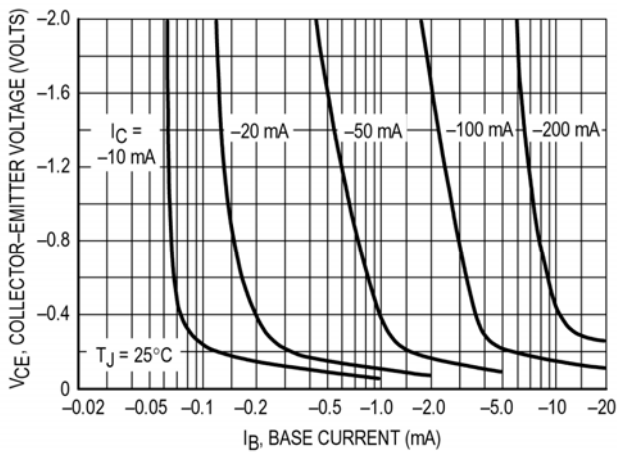
### BC556



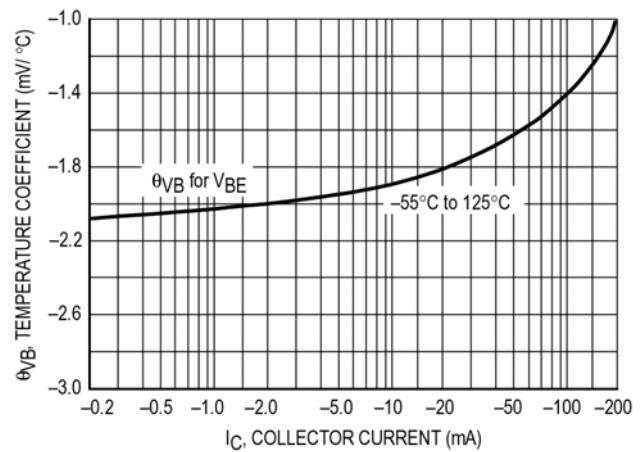
**DC Current Gain**



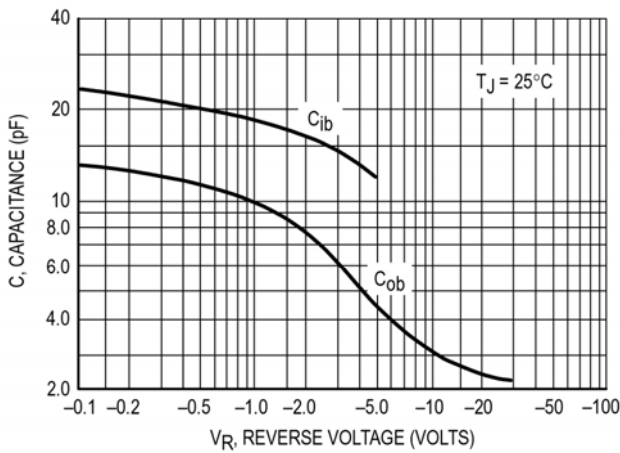
**"On" Voltage**



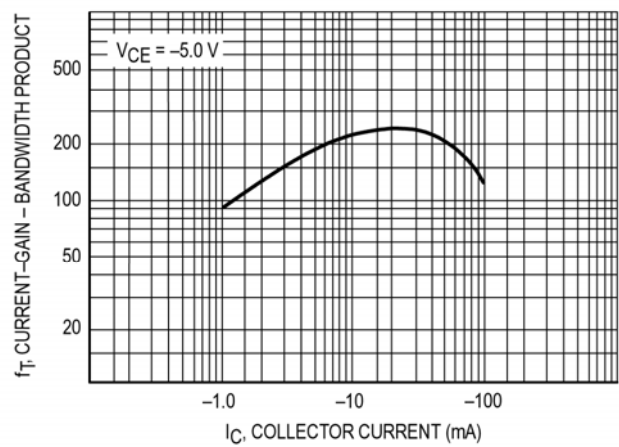
**Collector Saturation Region**



**Base-Emitter Temperature Coefficient**



**Capacitance**



**Current-Gain - Bandwidth Product**