



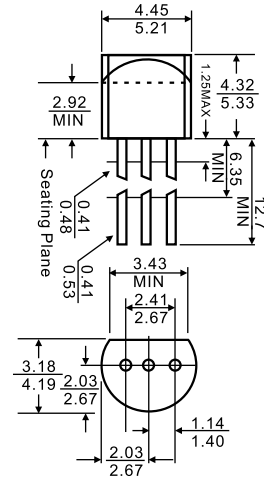
1. COLLECTOR
2. BASE
3. EMITTER

Features

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

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

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



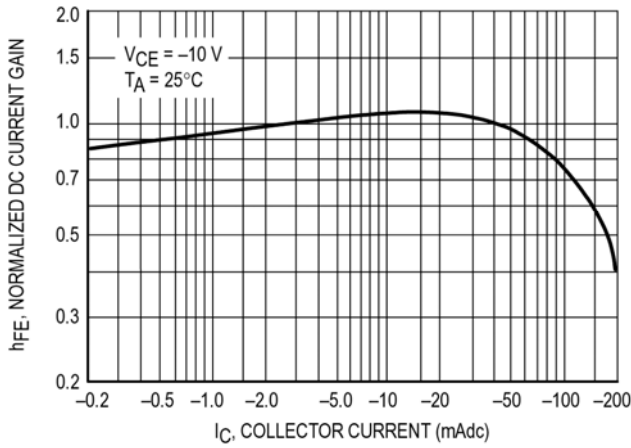
Dimensions in inches and (millimeters)

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

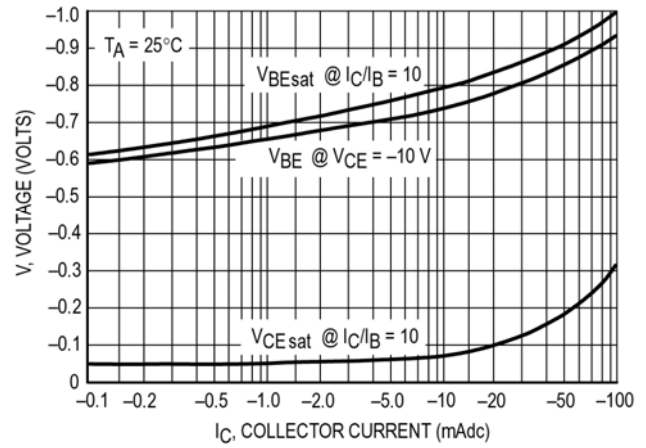
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{CBO}	I _C = -100μA, I _E =0	BC556	-80		V
			BC557	-50		
			BC558	-30		
Collector-emitter breakdown voltage	V _{CEO}	I _C = -2mA, I _B =0	BC556	-65		V
			BC557	-45		
			BC558	-30		
Emitter-base breakdown voltage	V _{EBO}	I _E = -100μA, I _C =0	-5		V	
Collector cut-off current	I _{CBO}	V _{CB} = -70 V, I _E =0 V _{CB} = -45 V, I _E =0 V _{CB} = -25V, I _E =0			-0.1	μA
			BC556			
			BC557			
Collector cut-off current	I _{CEO}	V _{CE} = -60 V, I _B =0 V _{CE} = -40 V, I _B =0 V _{CE} = -25 V, I _B =0			-0.1	μA
			BC556			
			BC557			
Emitter cut-off current	I _{EBO}	V _{EB} = -5 V, I _C =0			-0.1	μA
			BC556			
			BC557			
DC current gain	h _{FE}	V _{CE} =-5V, I _C = -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 _{CE(sat)}	I _C =-100mA, I _B = -5mA			-0.65	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -100mA, I _B =-5mA			-1	V
Transition frequency	f _T	V _{CE} = -5V, I _C = -10mA f = 100MHz	150			MHz

Typical Characteristics

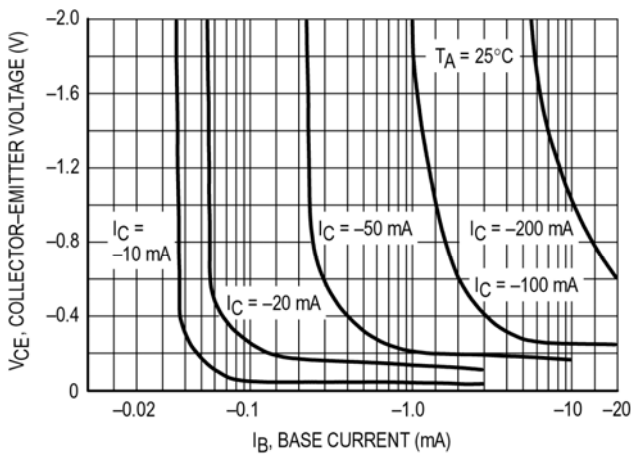
BC557/BC558



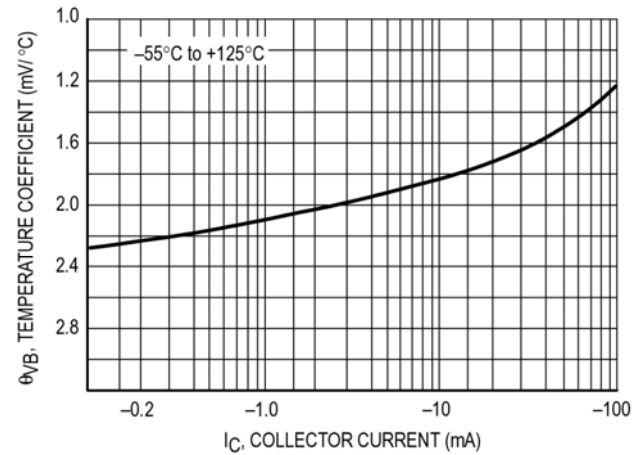
Normalized DC Current Gain



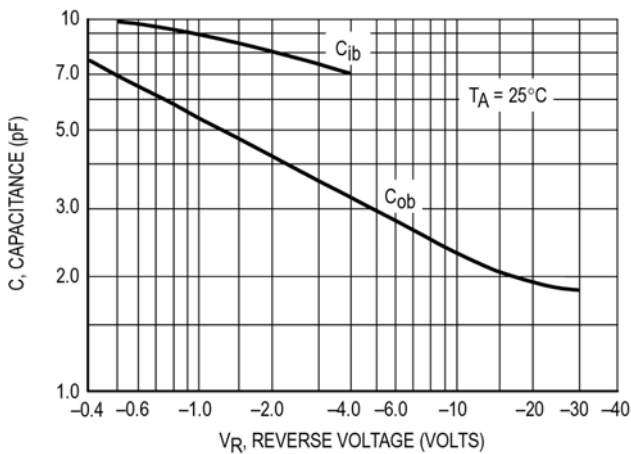
"Saturation" and "On" Voltages



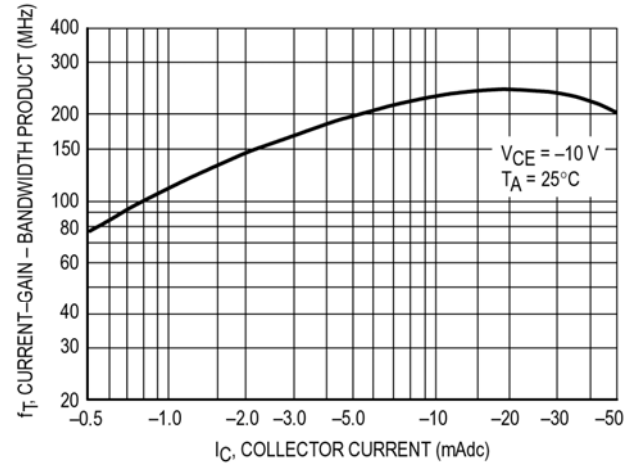
Collector Saturation Region



Base-Emitter Temperature Coefficient

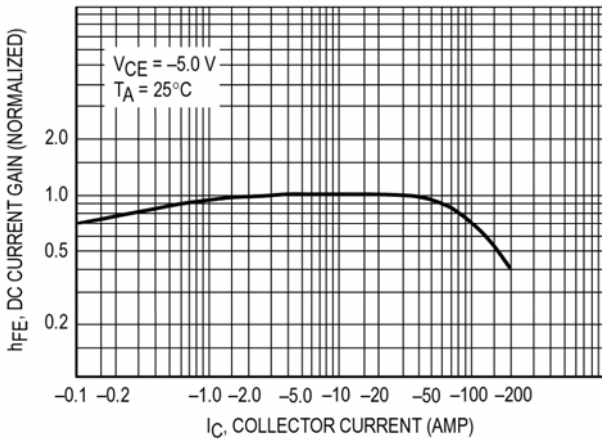


Capacitances

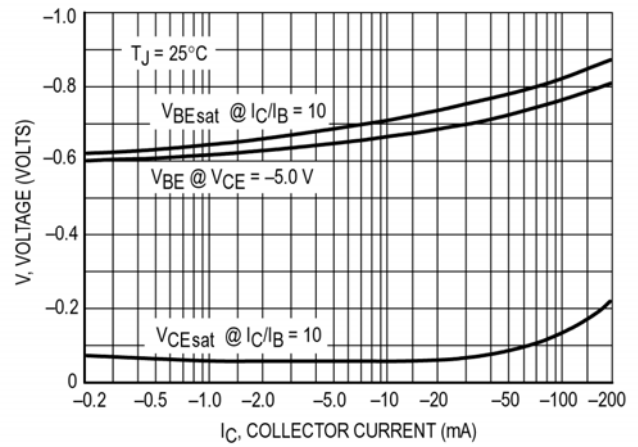


Current-Gain - Bandwidth Product

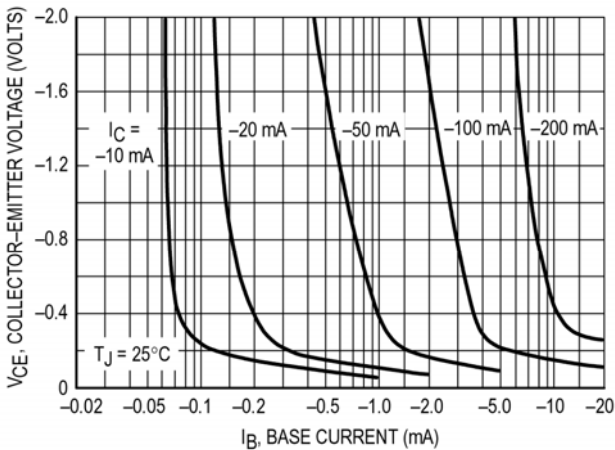
BC556



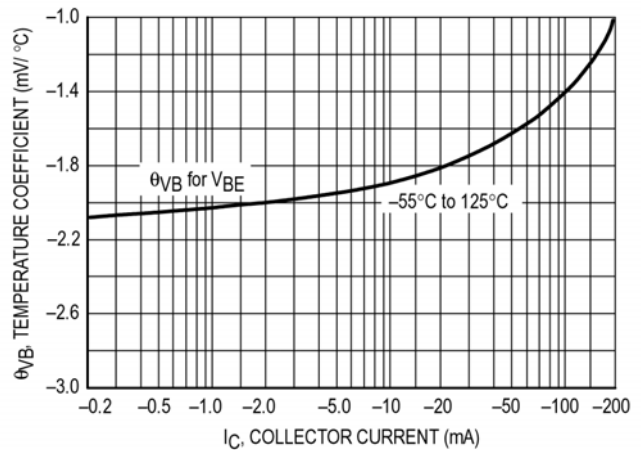
DC Current Gain



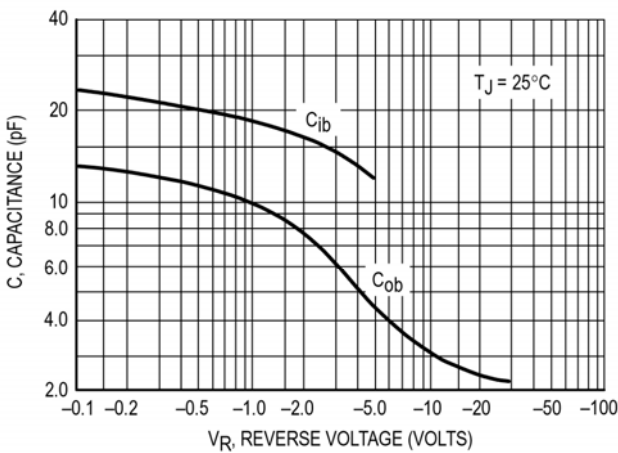
"On" Voltage



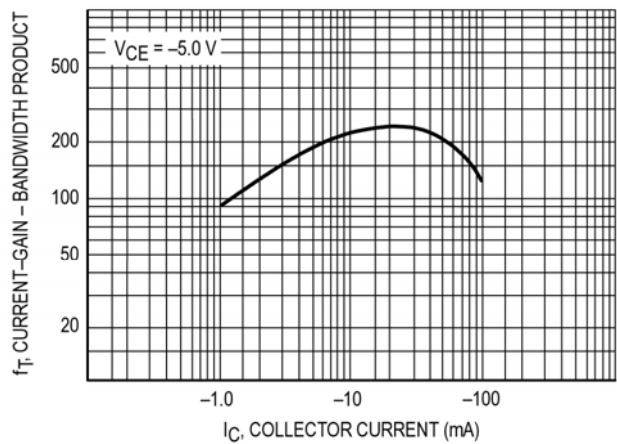
Collector Saturation Region



Base-Emitter Temperature Coefficient

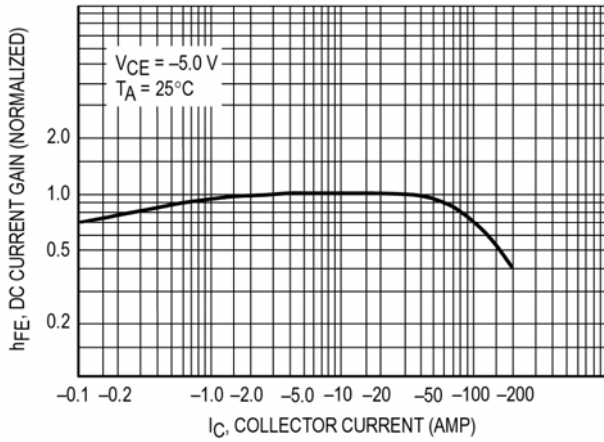


Capacitance

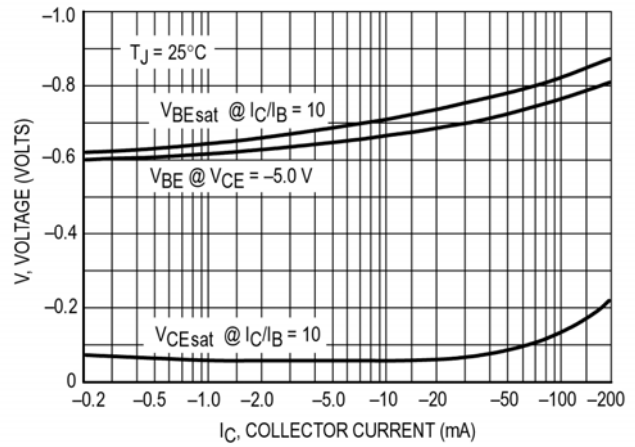


Current-Gain - Bandwidth Product

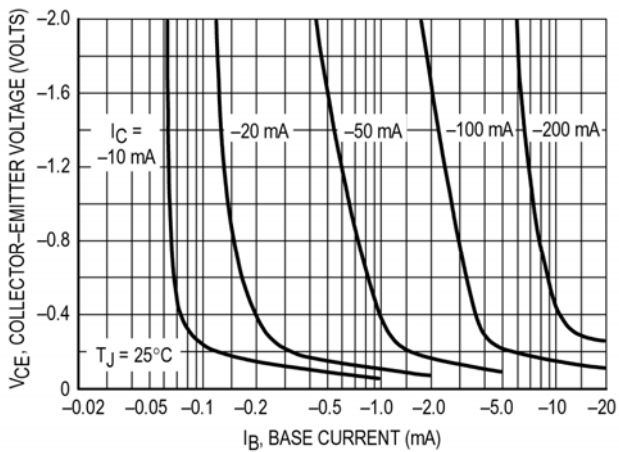
BC556



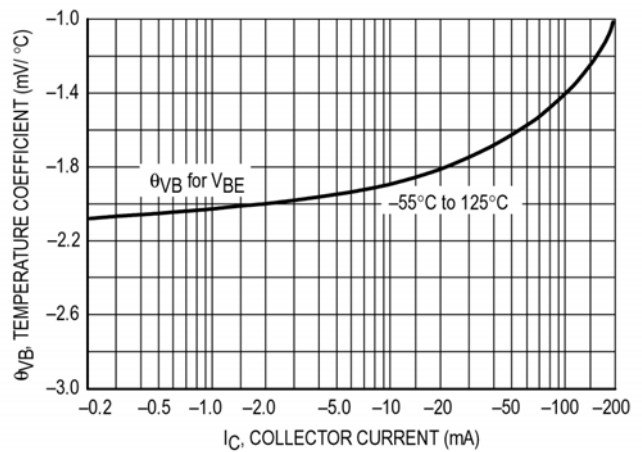
DC Current Gain



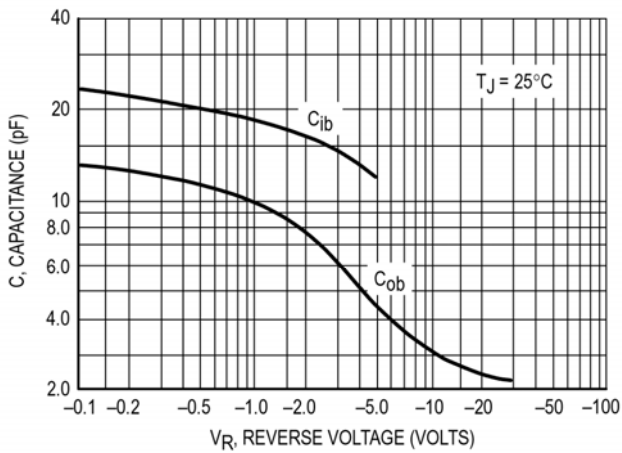
"On" Voltage



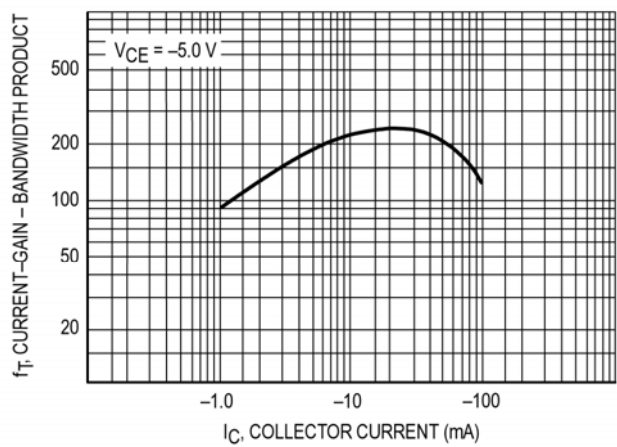
Collector Saturation Region



Base-Emitter Temperature Coefficient



Capacitance



Current-Gain - Bandwidth Product