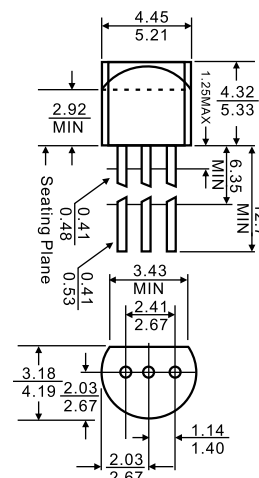




1. COLLECTOR
2. BASE
3. EMITTER

TO-92

Dimensions in inches and (millimeters)

Features

- ✧ High Voltage
- ✧ Complement to BC556,BC557,BC558

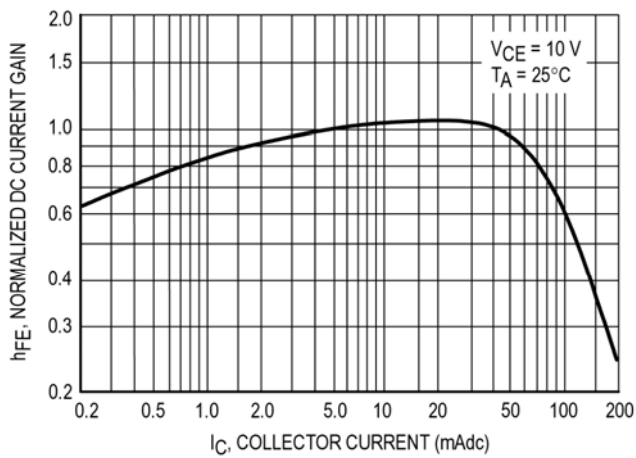
MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	U s
V_{CBO}	Collector-Base Voltage C546	80	V
	BC547	50	
	BC548	30	
V_{CEO}	Collector-Emitter Voltage BC546	65	V
	BC547	45	
	BC548	30	
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	100	mA
P_D	Total Device Dissipation	625	mW
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C

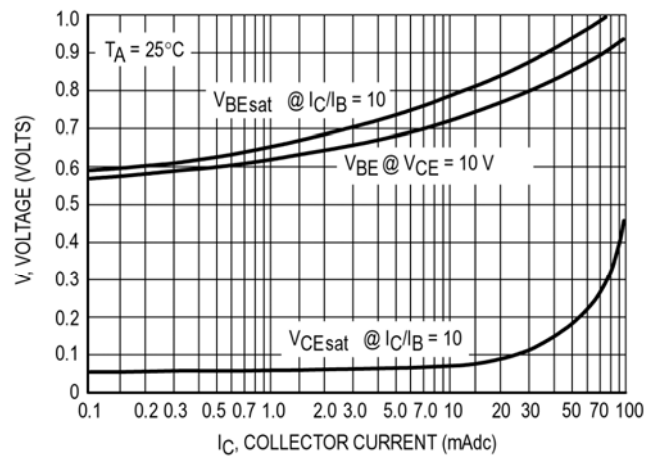
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BC546 BC547 BC548	V_{CBO}	80 50 30		V
Collector-emitter breakdown voltage	BC546 BC547 BC548	V_{CEO}	65 45 30		V
Emitter-base breakdown voltage		V_{EBO}	6		V
Collector cut-off current	BC546 BC547 BC548	I_{CBO}		0.1	μA
Collector cut-off current	BC546 BC547 BC548	I_{CEO}		0.1	μA
Emitter cut-off current	BC546 BC547 BC548	I_{EBO}		0.1	μA
DC current gain	BC546 BC547 BC548 BC546A/BC547A/BC548A BC546B/BC547B/BC548B BC546C/BC547C/BC548C	h_{FE}	110 110 110 110 200 420	800 800 800 220 450 800	
Collector-emitter saturation voltage		$V_{CE(sat)}$		0.3	V
Base-emitter saturation voltage		$V_{BE(sat)}$		1.1	V
Transition frequency		f_T	150		MHz

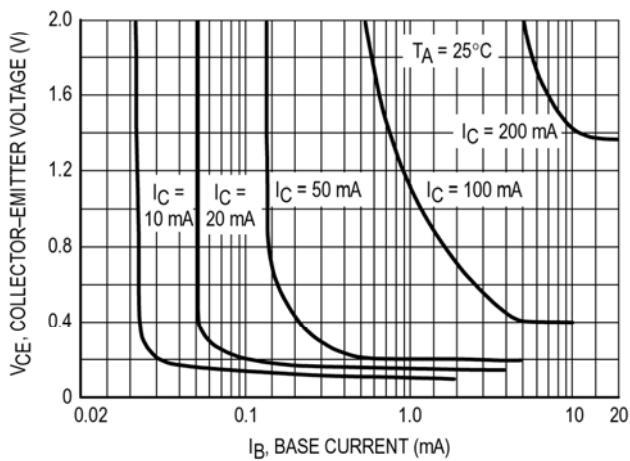
Typical Characteristics



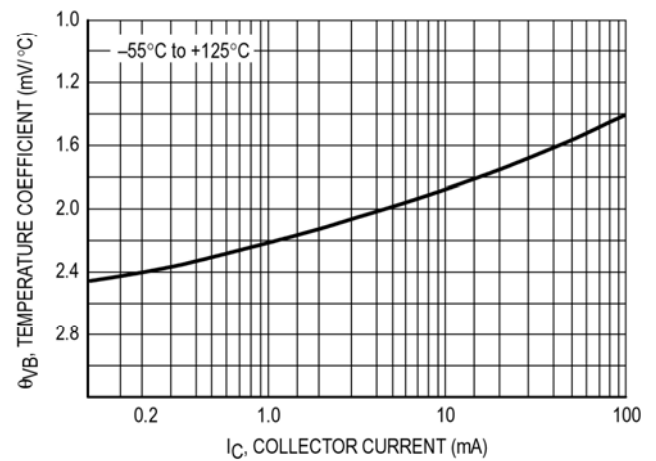
Normalized DC Current Gain



"Saturation" and "On" Voltages

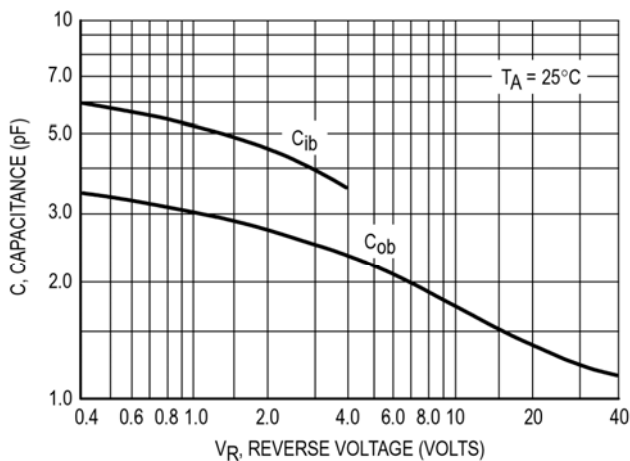


Collector Saturation Region

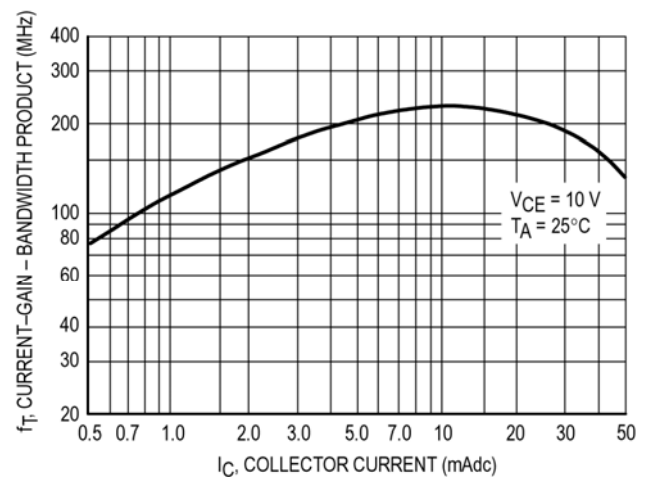


Base-Emitter Temperature Coefficient

BC547/BC548

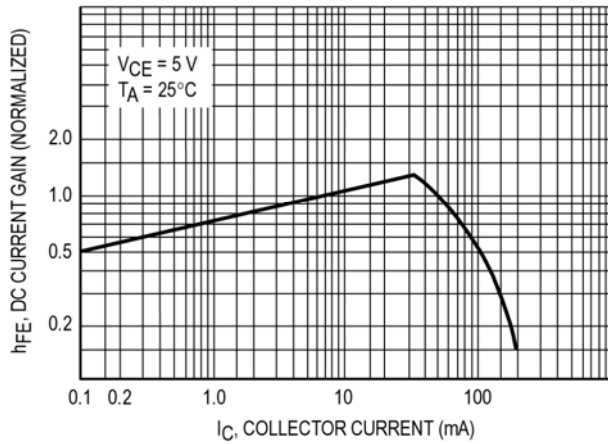


Capacitances

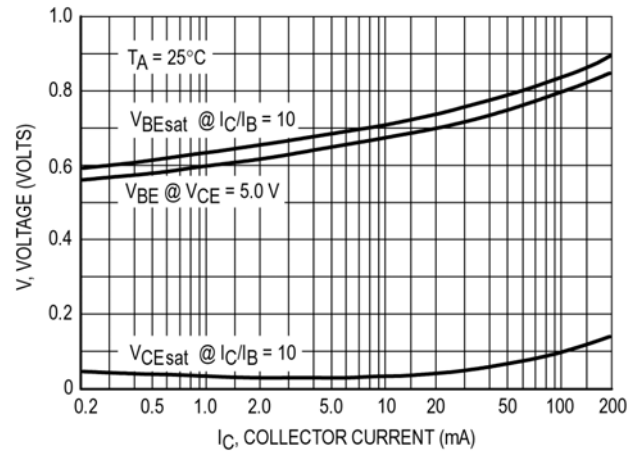


Current-Gain - Bandwidth Product

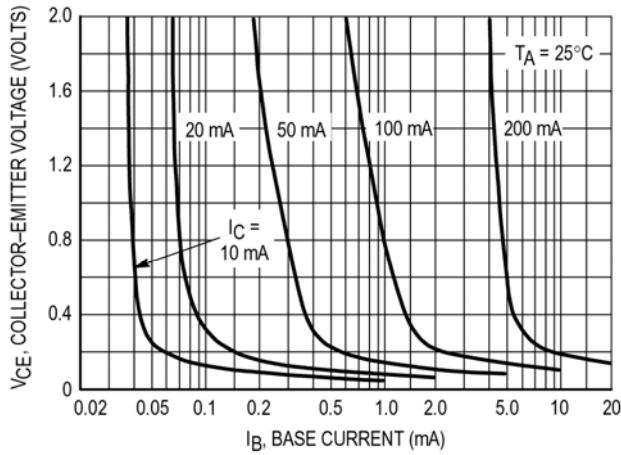
BC547/BC548



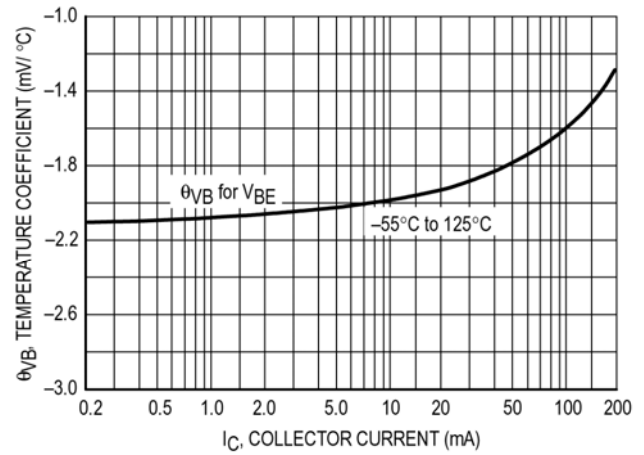
DC Current Gain



"On" Voltage

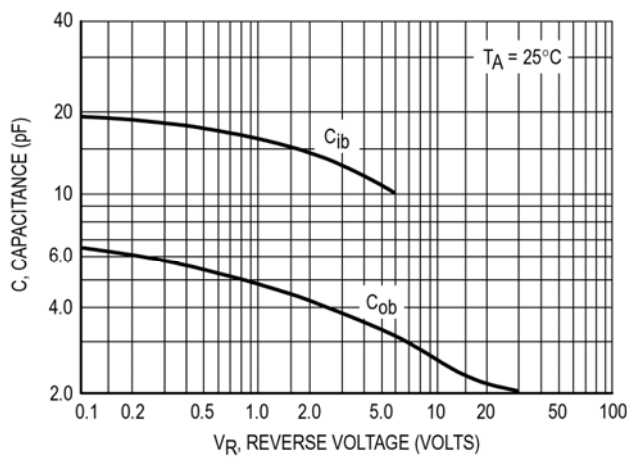


Collector Saturation Region

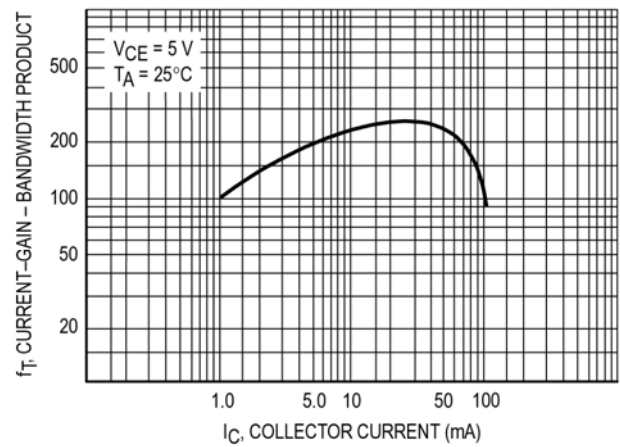


Base-Emitter Temperature Coefficient

BC546



Capacitance



Current-Gain - Bandwidth Product