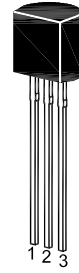


BC556...BC560

PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications

These transistors are subdivided into three groups A, B and C according to their current gain.



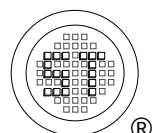
1. Collector 2. Base 3. Emitter
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	BC556 80	V
		BC557, BC560 50	
		BC558, BC559 30	
Collector Emitter Voltage	$-V_{CEO}$	BC556 65	V
		BC557, BC560 45	
		BC558, BC559 30	
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current (DC)	$-I_C$	100	mA
Peak Collector Current	$-I_{CM}$	200	mA
Total Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 5\text{ V}$, $-I_C = 2\text{ mA}$	h_{FE}	110	220	-
Current Gain Group A				
B				
C	h_{FE}	420	800	-
Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	15	nA
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	BC556 80	-	V
		BC557, BC560 50		
		BC558, BC559 30		
Collector Emitter Breakdown Voltage at $-I_C = 2\text{ mA}$	$-V_{(BR)CEO}$	BC556 65	-	V
		BC557, BC560 45		
		BC558, BC559 30		
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	V



BC556...BC560

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Collector Emitter Saturation Voltage at -I _C = 10 mA, -I _B = 0.5 mA at -I _C = 100 mA, -I _B = 5 mA	-V _{CE(sat)}	-	0.3 0.65	V
Base Emitter On Voltage at -V _{CE} = 5 V, -I _C = 2 mA at -V _{CE} = 5 V, -I _C = 10 mA	-V _{BE(on)}	0.55 -	0.75 0.82	V
Transition Frequency at -V _{CE} = 5 V, -I _C = 10 mA, f = 100 MHz	f _T	100	-	MHz
Collector Base Capacitance at -V _{CB} = 10 V, f = 1 MHz	C _{cb}	-	6	pF

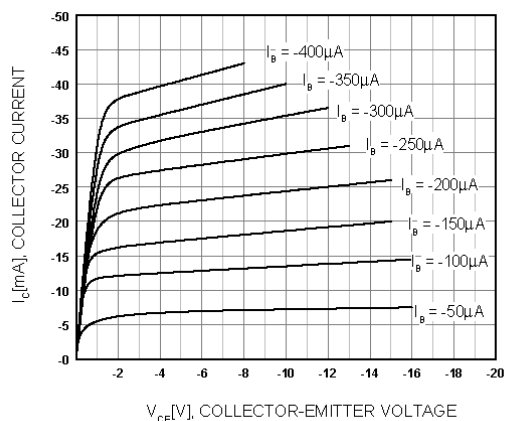


Figure 1. Static Characteristic

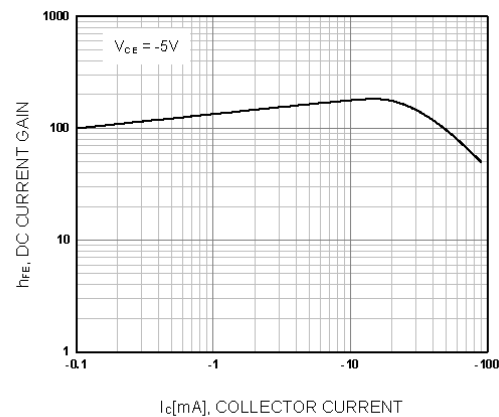


Figure 2. DC current Gain

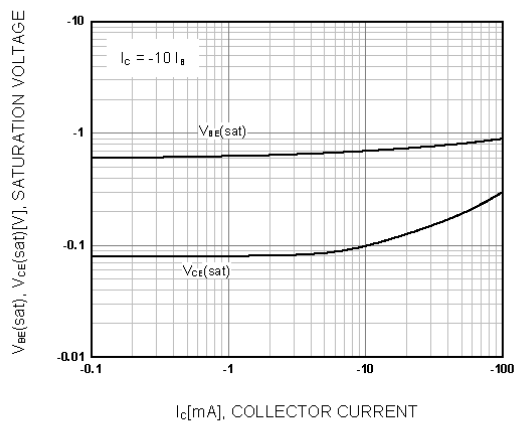


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

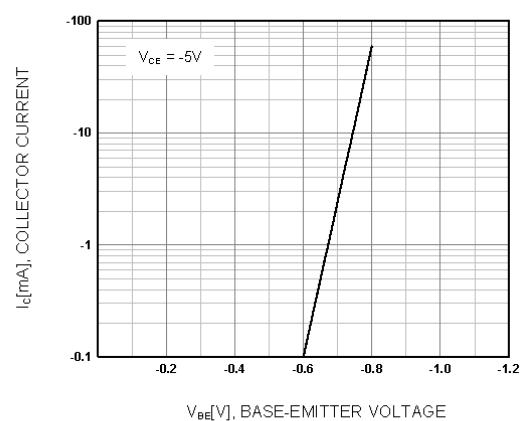


Figure 4. Base-Emitter On Voltage

