

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- 150°C Junction Temperature
- Through Hole Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: Type Number

Mechanical Data

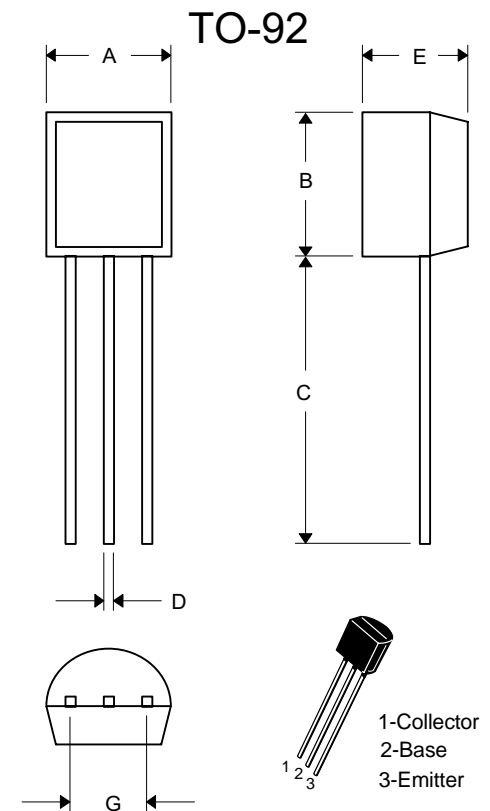
- Case: TO-92, Molded Plastic
- Polarity: indicated as below.

Maximum Ratings @ 25°C Unless Otherwise Specified

Charateristic	Symbol	Value	Unit
Collector-Emitter Voltage	BC556 BC557 BC558	V_{CEO} -65 -45 -30	V
Collector-Base Voltage	BC556 BC557 BC558	V_{CBO} -80 -50 -30	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current(DC)	I_C	-100	mA
Power Dissipation@ $T_A=25^\circ\text{C}$	P_d	625 5.0	mW mW/°C
Power Dissipation@ $T_C=25^\circ\text{C}$	P_d	1.5 12	W mW/°C
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	200	°C/W
Thermal Resistance, Junction to Case	$R_{\theta JC}$	83.3	°C/W
Operating & Storage Temperature	T_j, T_{STG}	-55~150	°C

BC556,B BC557,A,B,C BC558,B

PNP Silicon Amplifier Transistor 625mW



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	

BC556 thru BC558B

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

Collector Cut-off Current ($V_{CB} = -70\text{ V}$, $I_E = 0$)	I_{CBO}	—	—	-100	nA
Collector–Emitter Breakdown Voltage ($I_C = -2.0\text{ mAdc}$, $I_B = 0$)	$V_{(BR)CEO}$	-65 -45 -30	— — —	— — —	V
Collector–Base Breakdown Voltage ($I_C = -100\ \mu\text{Adc}$)	$V_{(BR)CBO}$	-80 -50 -30	— — —	— — —	V
Emitter–Base Breakdown Voltage ($I_E = -100\ \mu\text{Adc}$, $I_C = 0$)	$V_{(BR)EBO}$	-5.0 -5.0 -5.0	— — —	— — —	V

ON CHARACTERISTICS

DC Current Gain ($I_C = -10\ \mu\text{Adc}$, $V_{CE} = -5.0\text{ V}$)	h_{FE}	—	90	—	—
	BC557A	—	150	—	—
	BC556B/557B/558B	—	270	—	—
	BC557C	—	270	—	—
($I_C = -2.0\text{ mAdc}$, $V_{CE} = -5.0\text{ V}$)	BC556	120	—	500	—
	BC557	120	—	800	—
	BC558	120	—	800	—
	BC557A	120	170	220	—
	BC556B/557B/558B	180	290	460	—
	BC557C	420	500	800	—
($I_C = -100\text{ mAdc}$, $V_{CE} = -5.0\text{ V}$)	BC557A	—	120	—	—
	BC556B/557B/558B	—	180	—	—
	BC557C	—	300	—	—
Collector–Emitter Saturation Voltage ($I_C = -100\text{ mAdc}$, $I_B = -5.0\text{ mAdc}$)	$V_{CE(sat)}$	—	—	-0.3	V
Base–Emitter Saturation Voltage ($I_C = -100\text{ mAdc}$, $I_B = -5.0\text{ mAdc}$)	$V_{BE(sat)}$	—	—	-1.0	V
Base–Emitter On Voltage ($I_C = -2.0\text{ mAdc}$, $V_{CE} = -5.0\text{ Vdc}$)	$V_{BE(on)}$	-0.55	-0.62	-0.7	V
($I_C = -10\text{ mAdc}$, $V_{CE} = -5.0\text{ Vdc}$)		—	-0.7	-0.82	—

SMALL–SIGNAL CHARACTERISTICS

Current–Gain — Bandwidth Product ($I_C = -10\text{ mA}$, $V_{CE} = -5.0\text{ V}$, $f = 100\text{ MHz}$)	f_T	150	280	—	MHz
	BC556	150	320	—	—
	BC557	150	360	—	—
	BC558	150	360	—	—
Output Capacitance ($V_{CB} = -10\text{ V}$, $I_C = 0$, $f = 1.0\text{ MHz}$)	C_{ob}	—	3.0	6.0	pF

BC557/BC558

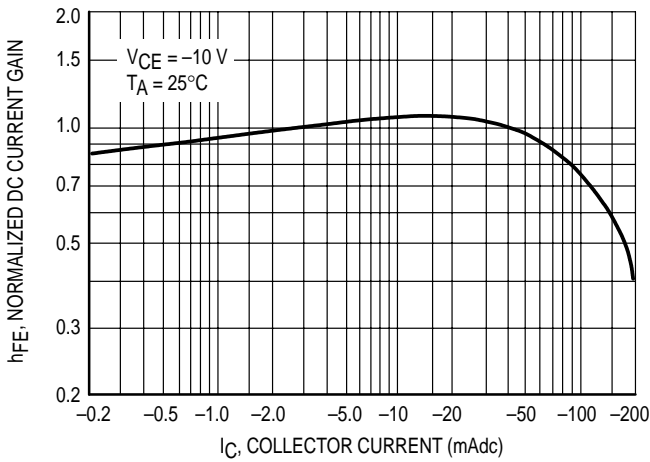


Figure 1. Normalized DC Current Gain

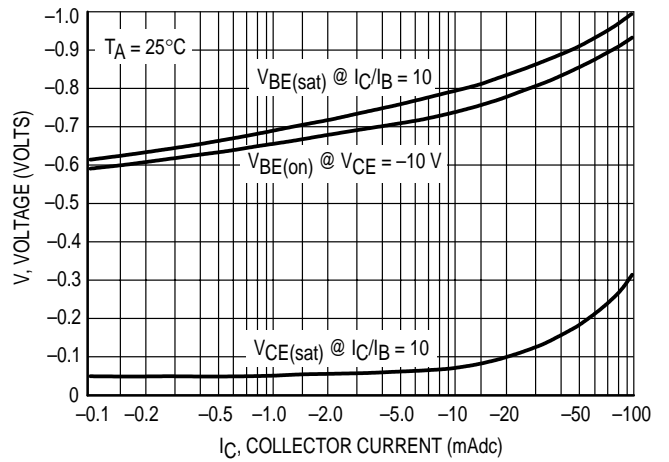


Figure 2. "Saturation" and "On" Voltages

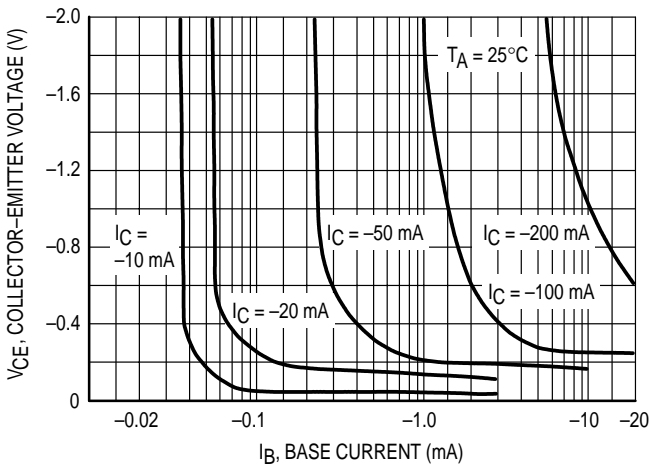


Figure 3. Collector Saturation Region

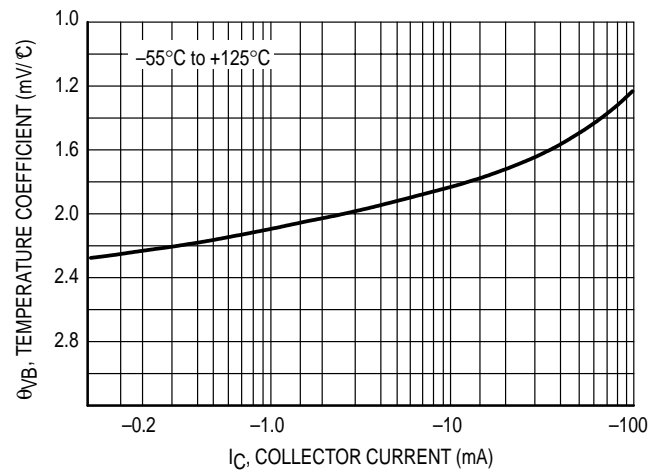


Figure 4. Base-Emitter Temperature Coefficient

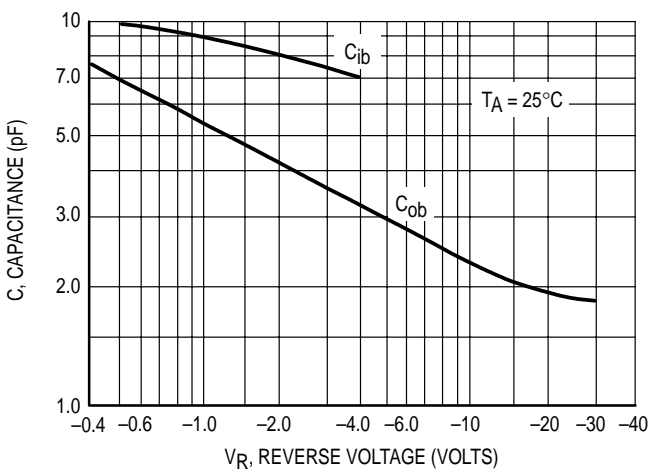


Figure 5. Capacitances

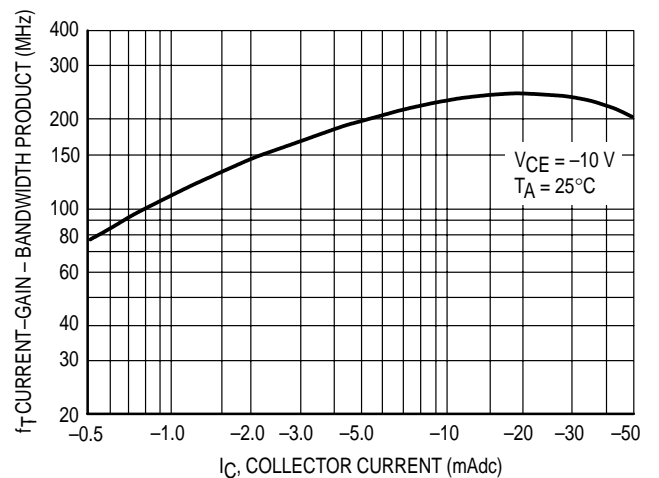


Figure 6. Current-Gain - Bandwidth Product

BC556

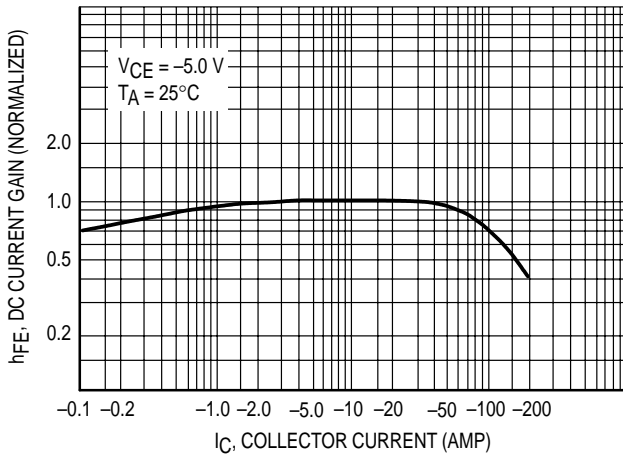


Figure 7. DC Current Gain

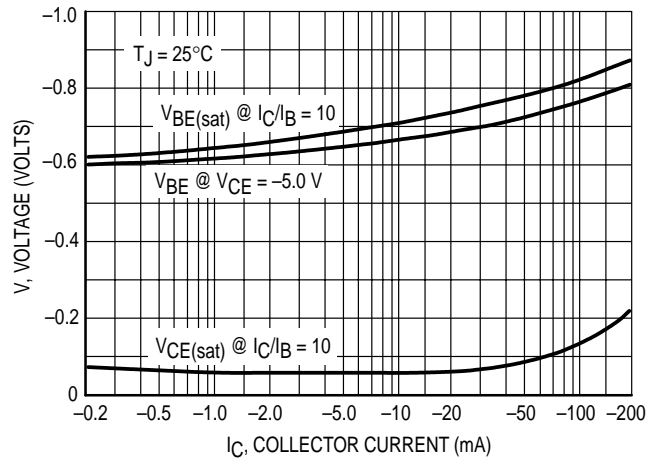


Figure 8. "On" Voltage

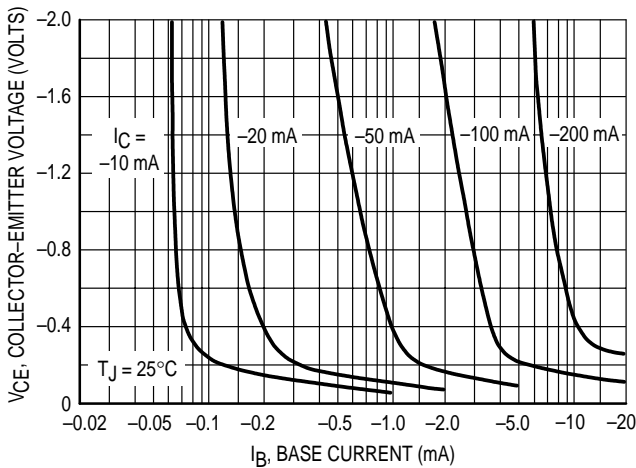


Figure 9. Collector Saturation Region

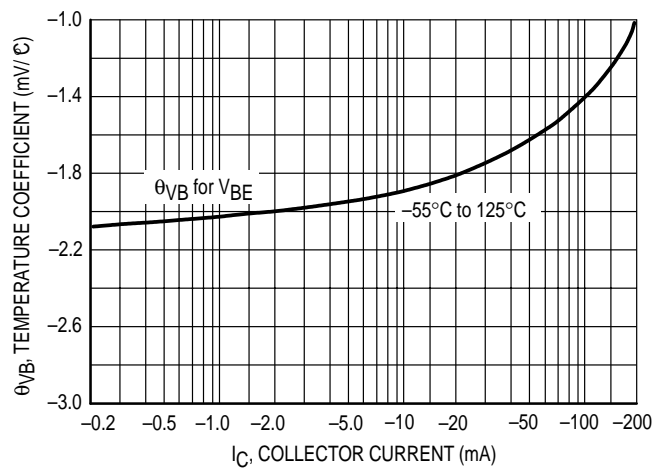


Figure 10. Base-Emitter Temperature Coefficient

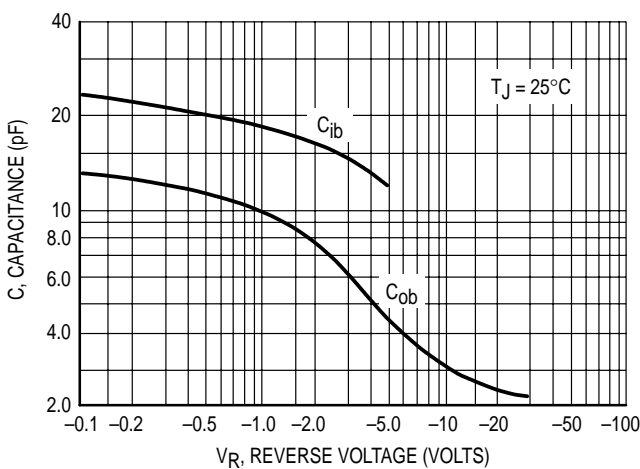


Figure 11. Capacitance

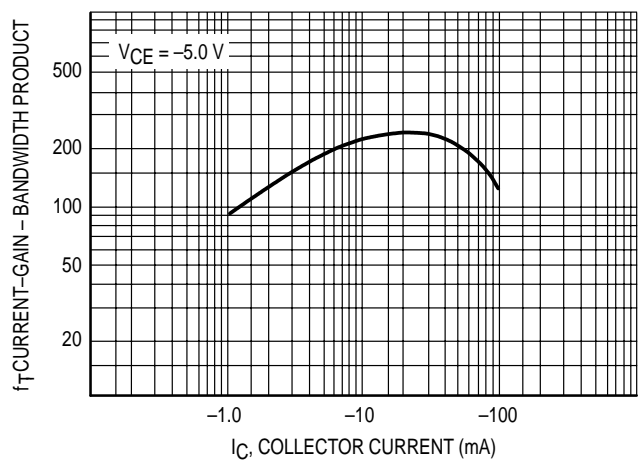


Figure 12. Current-Gain - Bandwidth Product



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Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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