

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
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

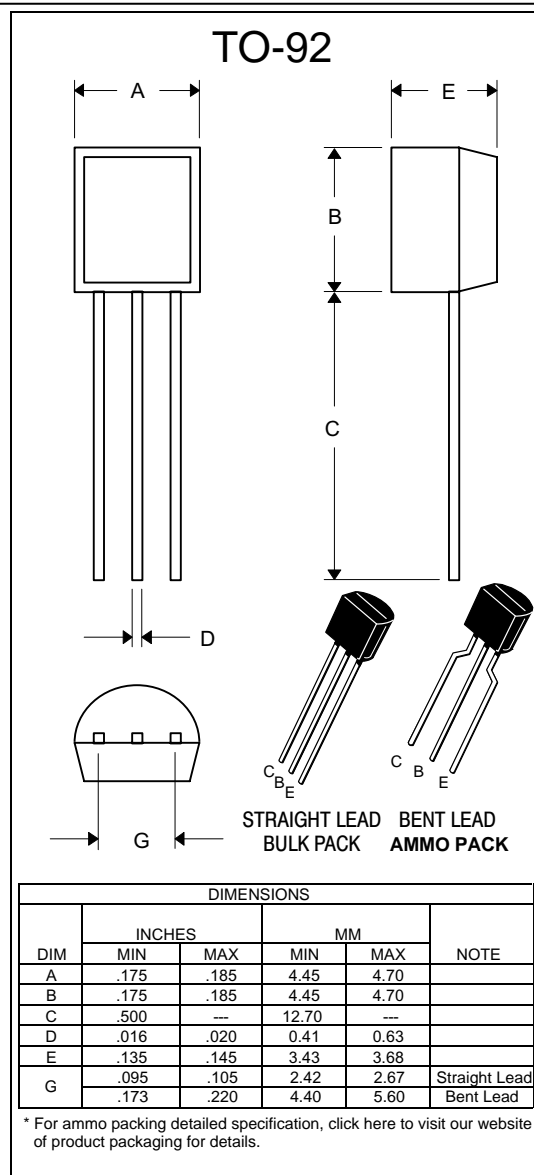
- Case: TO-92, Molded Plastic
- Polarity: indicated as below.

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



BC556 thru BC558B

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

Characteristic	Symbol	Min	Typ	Max	Unit
----------------	--------	-----	-----	-----	------

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	—	—	—	—
($I_C = -2.0\text{ mAdc}$, $V_{CE} = -5.0\text{ V}$)	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	—	—	—	—
Output Capacitance ($V_{CB} = -10\text{ V}$, $I_C = 0$, $f = 1.0\text{ MHz}$)	C_{ob}	—	3.0	6.0	pF

BC557/BC558

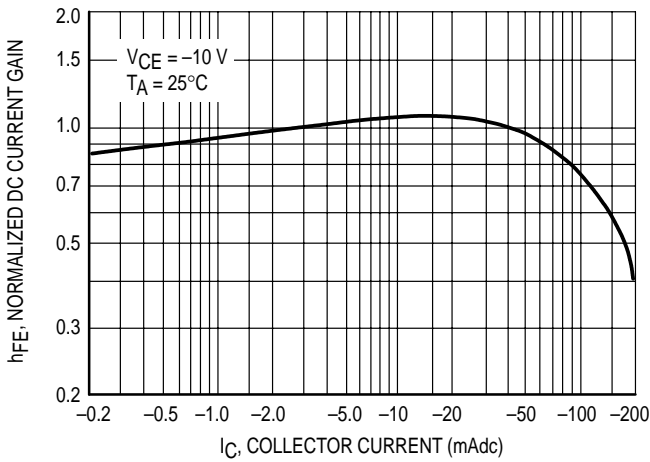


Figure 1. Normalized DC Current Gain

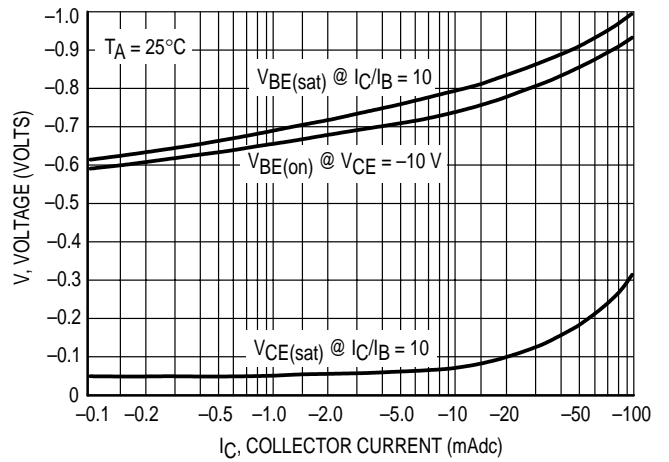


Figure 2. "Saturation" and "On" Voltages

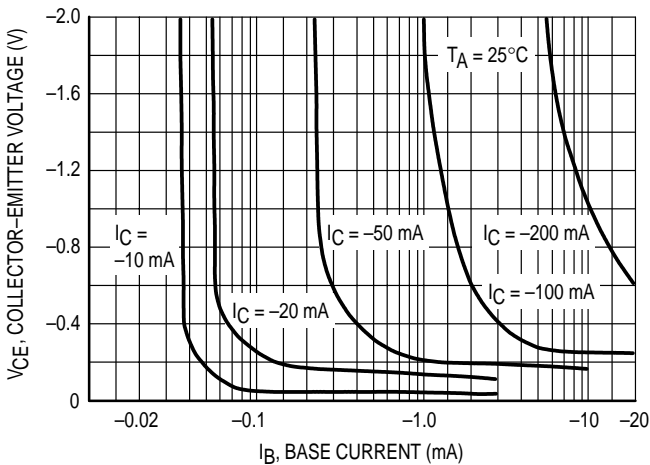


Figure 3. Collector Saturation Region

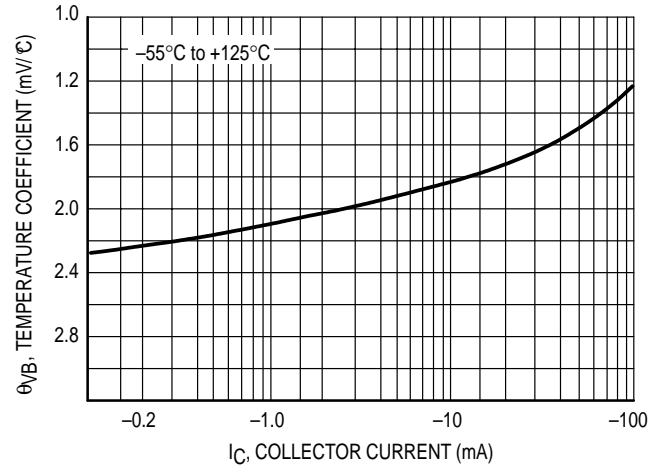


Figure 4. Base-Emitter Temperature Coefficient

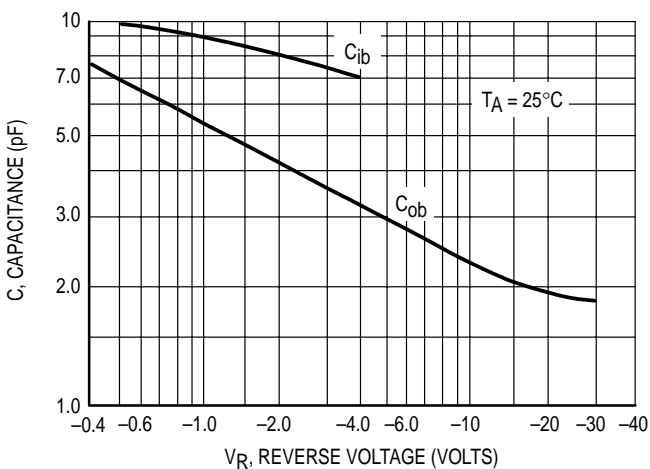


Figure 5. Capacitances

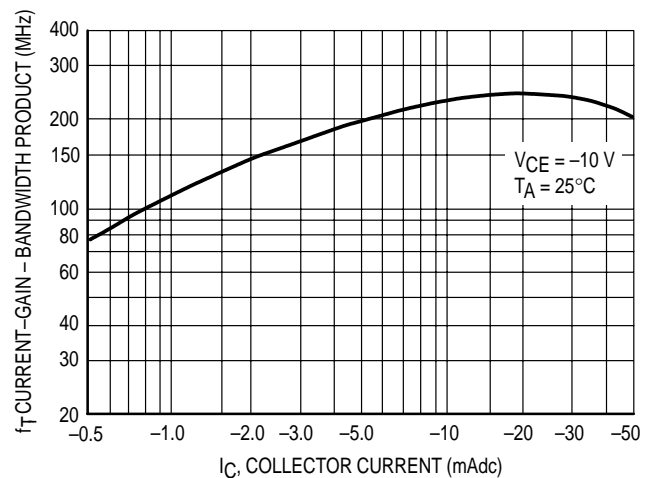


Figure 6. Current-Gain - Bandwidth Product

BC556

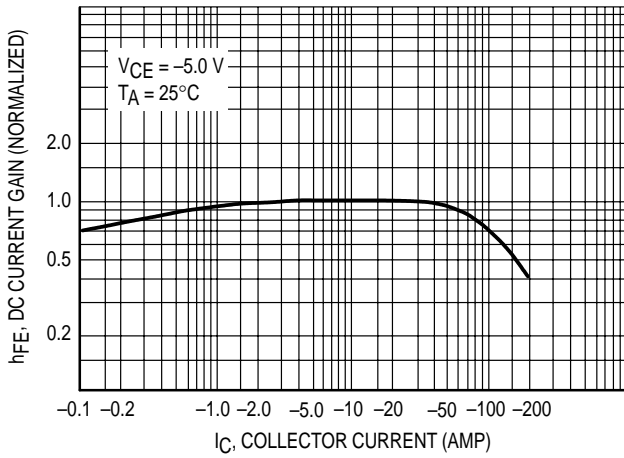


Figure 7. DC Current Gain

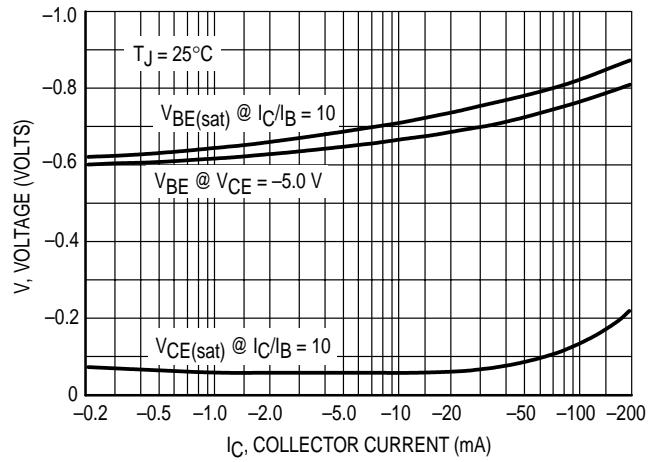


Figure 8. "On" Voltage

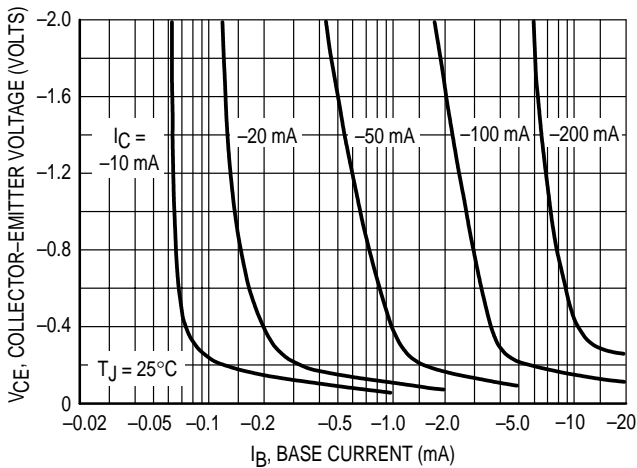


Figure 9. Collector Saturation Region

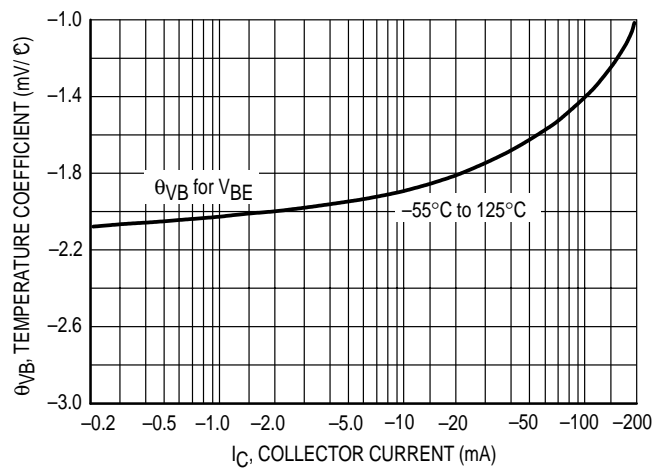


Figure 10. Base-Emitter Temperature Coefficient

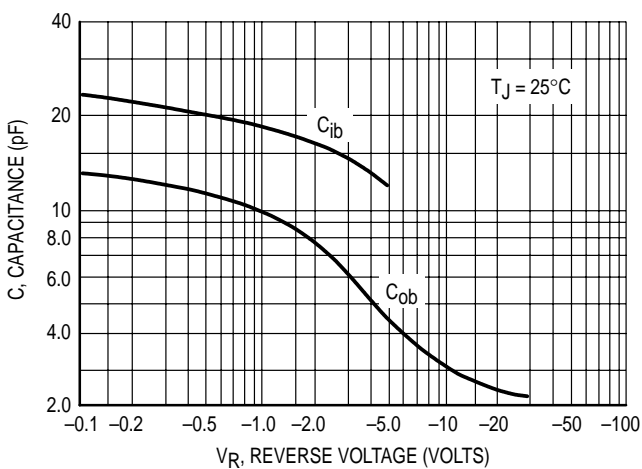


Figure 11. Capacitance

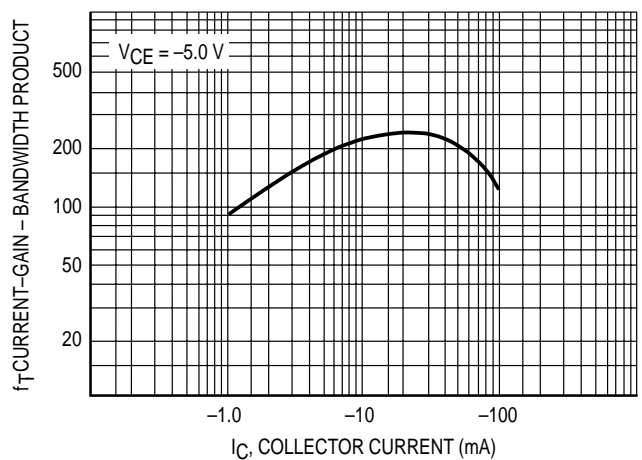


Figure 12. Current-Gain - Bandwidth Product



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.