Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BC556A/B/C
BC557A/B/C
BC558A/B/C

PNP Silicon
Amplifier Transistor
625mW

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
- Moisure Sensitivity Level 1
- Marking:Type Number
- Halogen free available upon request by adding suffix "-HF"

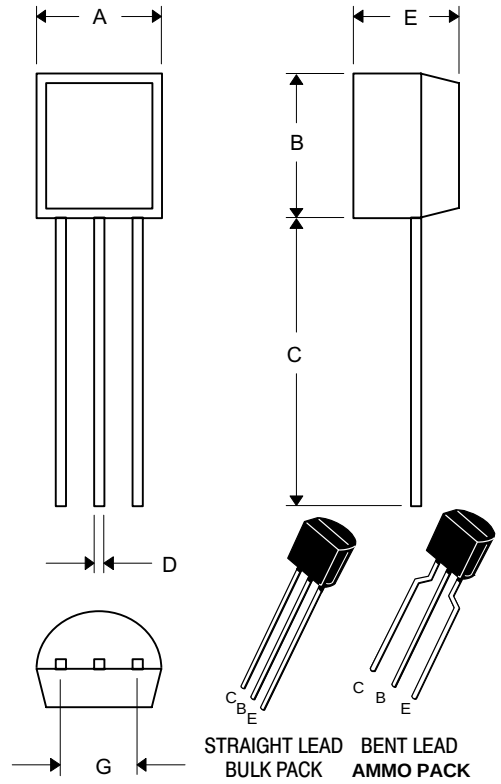
Mechanical Data

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

Maximum Ratings @ 25°C Unless Otherwise Specified

Charateristic		Symbol	Value	Unit
Collector-Emitter Voltage	BC556	V_{CEO}	-65	V
	BC557		-45	
	BC558		-30	
Collector-Base Voltage	BC556	V_{CBO}	-80	V
	BC557		-50	
	BC558		-30	
Emitter-Base Voltage		V_{EBO}	-5.0	V
Collector Current(DC)		I_C	-100	mA
Power Dissipation@T_A=25°C		P_d	625 5.0	mW mW/°C
Power Dissipation@T_C=25°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

TO-92



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC556	$V_{(BR)CBO}$	I_C= -0.1mA,I_E=0	-80			V
	BC557			-50			
	BC558			-30			
Collector-emitter breakdown voltage	BC556	$V_{(BR)CEO}$	I_C=-2mA,I_B=0	-65			V
	BC557			-45			
	BC558			-30			
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	BC556	I_{CBO}	V_{CB}=-70V,I_E=0			-0.1	μA
	BC557		V_{CB}=-45V,I_E=0			-0.1	μA
	BC558		V_{CB}=-25V,I_E=0			-0.1	μA
Collector cut-off current	BC556	I_{CEO}	V_{CE}=-60V,I_B=0			-0.1	μA
	BC557		V_{CE}=-40V,I_B=0			-0.1	μA
	BC558		V_{CE}=-25V,I_B=0			-0.1	μA
Emitter cut-off current		I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain		h_{FE} *	V_{CE}=-5V, I_C=-2mA	120		800	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=-10mA,I_B=-0.5mA			-0.3	V
			I_C=-100mA,I_B=-5mA			-0.65	V
Base-emitter saturation voltage		$V_{BE(sat)}$	I_C=-10mA,I_B=-0.5mA			-0.8	V
			I_C=-100mA,I_B=-5mA			-1	V
Base-emitter voltage		V_{BE}	V_{CE}=-5V, I_C=-2mA	-0.55		-0.7	V
			V_{CE}=-5V, I_C=-10mA			-0.82	V
Collector output capacitance		C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz			6	pF
Transition frequency	BC556	f_T	V_{CE}=-5V,I_C=-10mA, f=100MHz		150		MHz
	BC557				150		MHz
	BC558				150		MHz

CLASSIFICATION of h_{FE}

RANK	A	B	C
RANGE	120-220	180-460	420-800

BC557/BC558

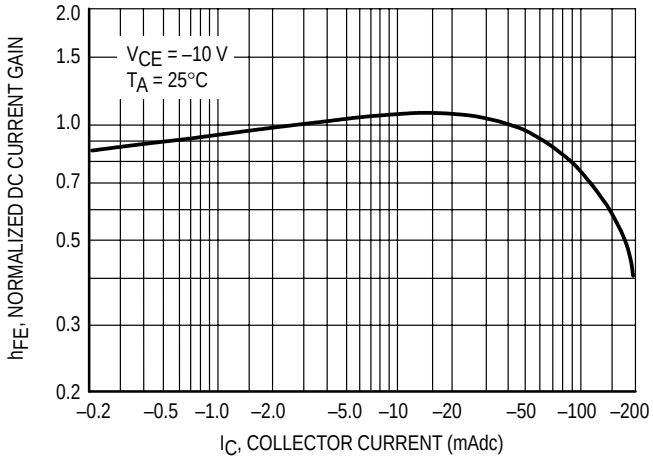


Figure 1. Normalized DC Current Gain

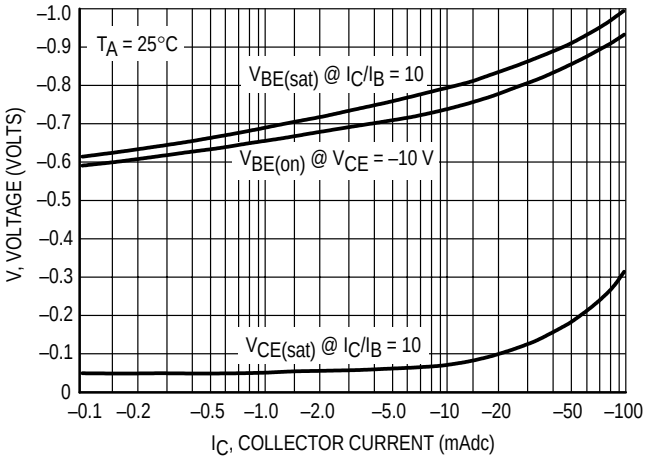


Figure 2. “Saturation” and “On” Voltages

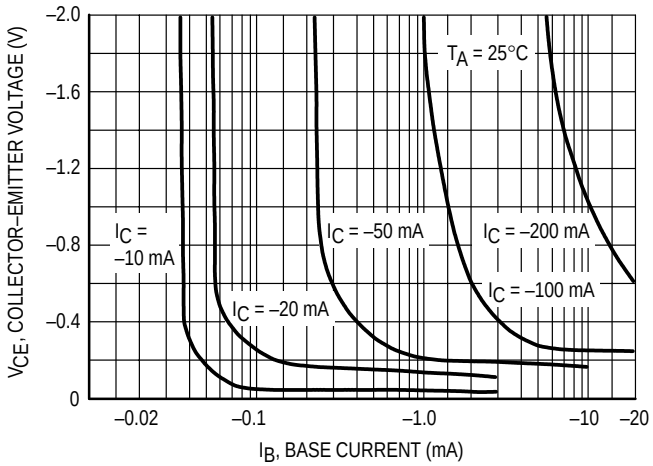


Figure 3. Collector Saturation Region

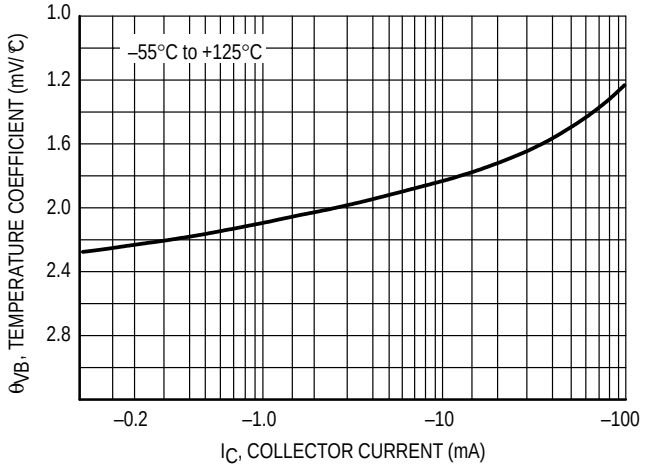


Figure 4. Base–Emitter Temperature Coefficient

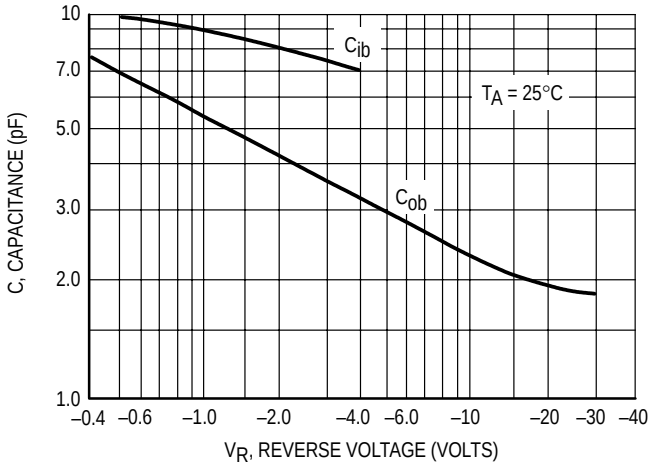


Figure 5. Capacitances

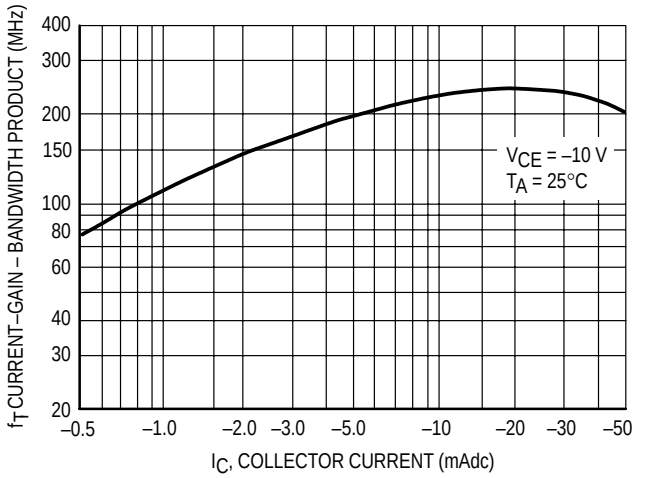


Figure 6. Current–Gain – Bandwidth Product

BC556

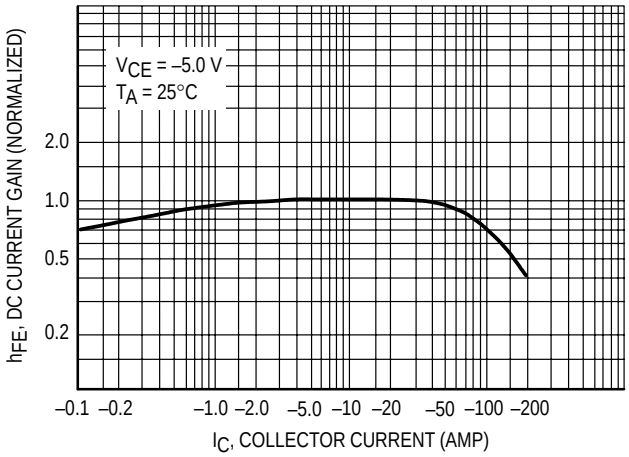


Figure 7. DC Current Gain

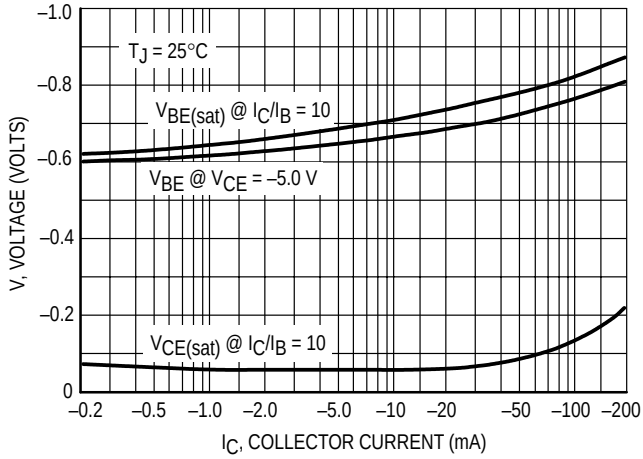


Figure 8. “On” Voltage

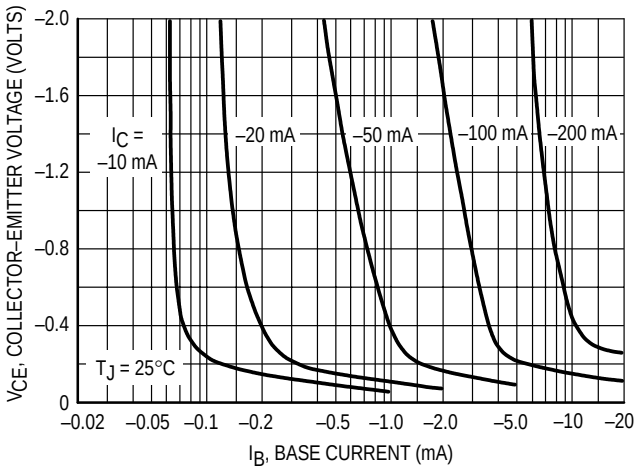


Figure 9. Collector Saturation Region

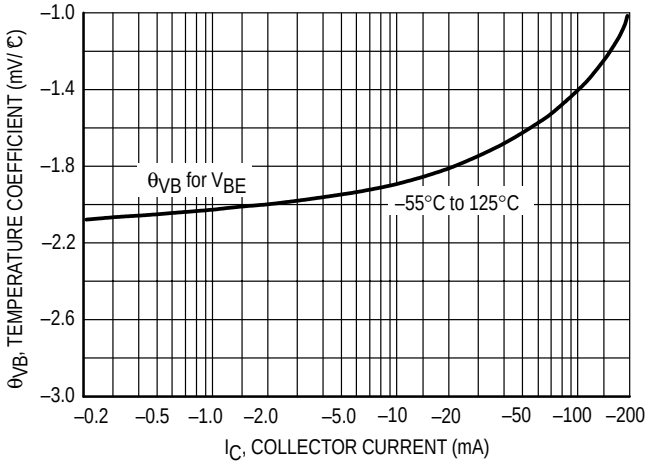


Figure 10. Base–Emitter Temperature Coefficient

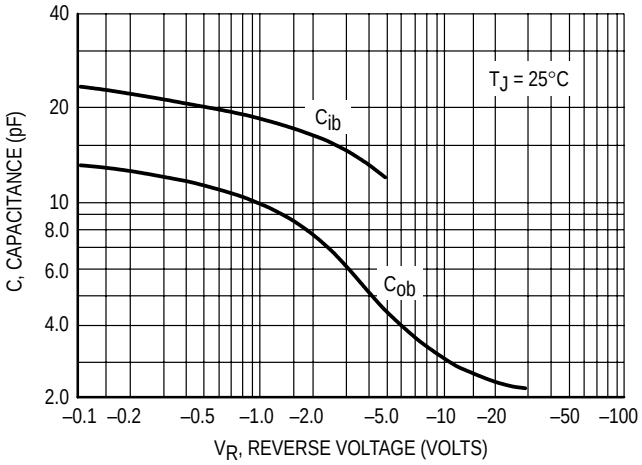


Figure 11. Capacitance

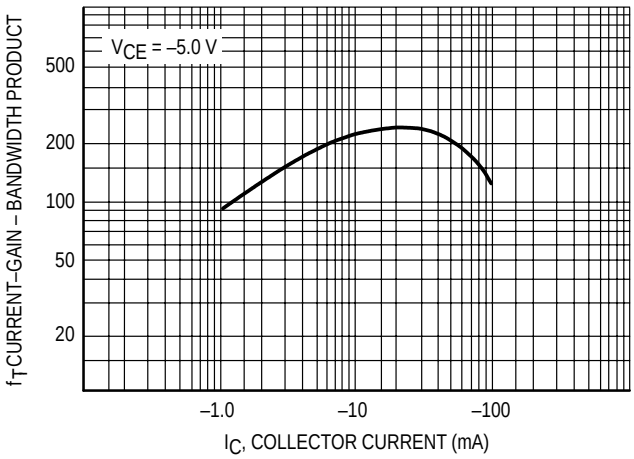


Figure 12. Current–Gain – Bandwidth Product

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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for RF Bipolar Transistors ***category:***

Click to view products by Micro Commercial Components (MCC) ***manufacturer:***

Other Similar products are found below :

MAPRST0912-50 MCH4016-TL-H MMBT5551-G PH3135-90S MRF10120 MRF587 15GN01CA-TB-E BFR 360L3 E6765 PH1214-100EL PH1214-25M 2SA1257-5-TB-E MAPRST0912-350 MCH4014-TL-H MMBTH10-TP BFP 420F H6327 BFP 620F H7764 BFP 640F H6327 BFP 720F H6327 BFP 740F H6327 BFR 340L3 E6327 BFR 360F H6765 BFR 740L3RH E6327 PH2729-25M MRF10031 NSVF4009SG4T1G DSC5G02D0L BFP 182R E7764 BFP405H6740XTSA1 MRF10350 MRF321 PH2729-65M MRF317 ASMA201 MCH4015-TL-H BF888H6327XTSA1 MMBT2222A-G BFP196WH6327XTSA1 BFP405FH6327XTSA1 BFP640ESDH6327XTSA1 BFR505T,115 BFU550WX BFU550XRR BFU580QX MRF10150 55GN01FA-TL-H NSVF4020SG4T1G NSVF6003SB6T1G MMBT5179 MS1406 STBV32-AP