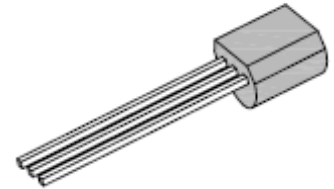
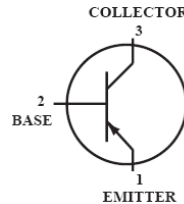


Small Signal General Purpose Transistors (PNP)

Features

- PNP Silicon Epitaxial Planar Transistor for Switching and Amplifier Applications
- RoHS compliance



TO-92



Mechanical Data

Case:	TO-92, Plastic Package
Terminals:	Solderable per MIL-STD-202G, Method 208
Weight:	0.18 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	BC556	BC557	BC558	Unit
V_{CEO}	Collector-Emitter Voltage	-65	-45	-30	V
V_{CB0}	Collector-Base Voltage	-80	-50	-30	V
V_{EBO}	Emitter-Base Voltage	-5.0			V
I_c	Collector Current-Continuous	100			mA
P_{tot}	Total Device Dissipation Alumina Substrate T _A =25°C	625			mW/° C
T_J, T_{STG}	Junction and Storage Temperature Range	-55 to +150			° C

Small Signal General Purpose Transistors (PNP)

BC556/BC557/BC558

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Off Characteristics

Symbol	Description	BC556		BC557		BC558		Unit	Conditions
		Min.	Max.	Min.	Max.	Min.	Max.		
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	-65	-	-45	-	-30	-	V	$I_C=-2mA, I_B=0$
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	-80	-	-50	-	-30	-	V	$I_C=100\mu A, I_E=0$
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	-5.0	-	-5.0	-	-5.0	-	V	$I_E=100\mu A, I_C=0$
I_{CEO}	Collector-Emitter Cut-off Current	-	-0.1	-	-0.1	-	-0.1	μA	
		$V_{CE}=-60V, I_B=0$		$V_{CE}=-40V, I_B=0$		$V_{CE}=-25V, I_B=0$			
I_{CBO}	Collector-Base Cut-off Current	-	-0.1	-	-0.1	-	-0.1	μA	
		$V_{CB}=-70V, I_E=0$		$V_{CB}=-45V, I_E=0$		$V_{CB}=-25V, I_E=0$			
I_{EBO}	Emitter-Base Cut-off Current	-	-0.1	-	-0.1	-	-0.1	μA	$V_{EB}=-5.0V, I_C=0$

On Characteristics

Symbol	Description	BC556		BC557		BC558		Unit	Conditions
		Min.	Max.	Min.	Max.	Min.	Max.		
h_{FE}	D.C. Current Gain	120	500	120	800	120	800		$V_{CE}=-5V, I_C=-2mA$
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	-	-0.3	-	-0.3	-	-0.3	V	$I_C=-100mA, I_B=-5mA$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	-	-1	-	-1	-	-1	V	$I_C=-100mA, I_B=-5mA$
f_t	Transition Frequency	150	-	150	-	150	-	MHz	$V_{CE}=-5V, I_C=-10mA, f=100MHz$

h_{FE} Classification

Classification	BC556A BC557A BC558A	BC556B BC557B BC558B	BC557C BC558C
h_{FE}	120~220	180~460	420~800

Small Signal General Purpose Transistors (PNP)

BC556/BC557/BC558

Typical Characteristics Curves

BC557/BC558

Fig.1- Normalized DC Current Gain

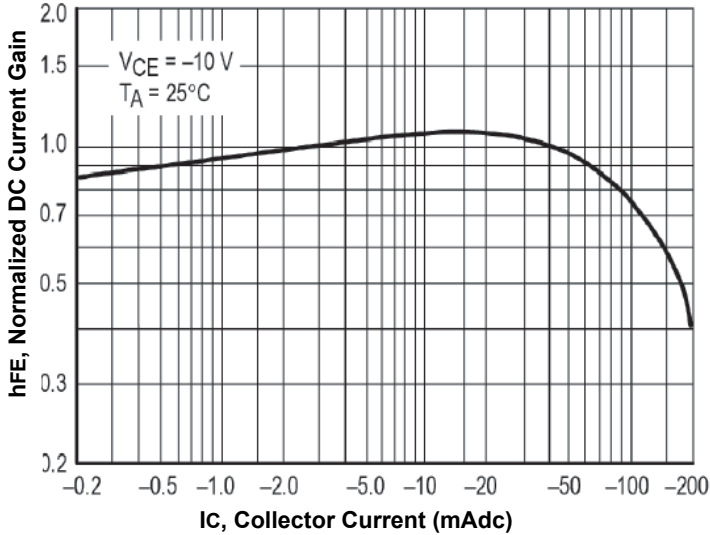


Fig.2- "Saturation" and "On" Voltages

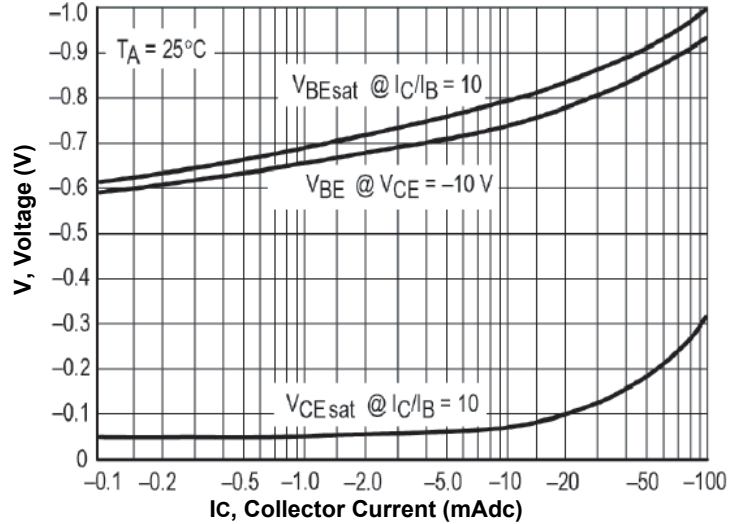


Fig.3- Collector Saturation Region

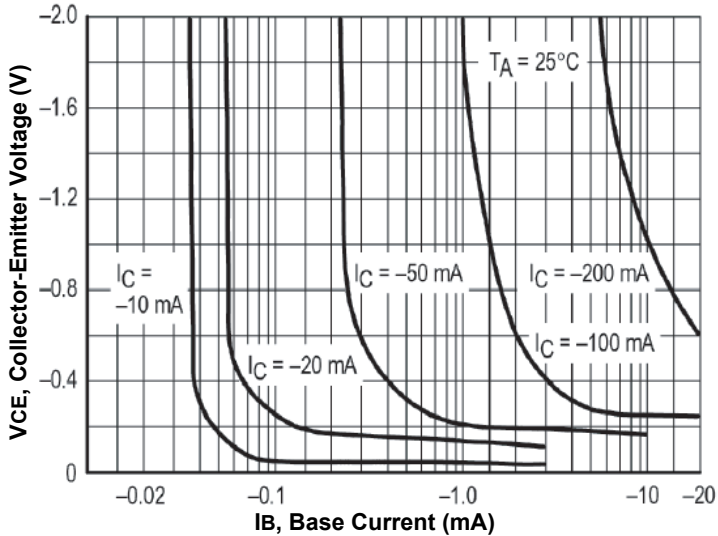
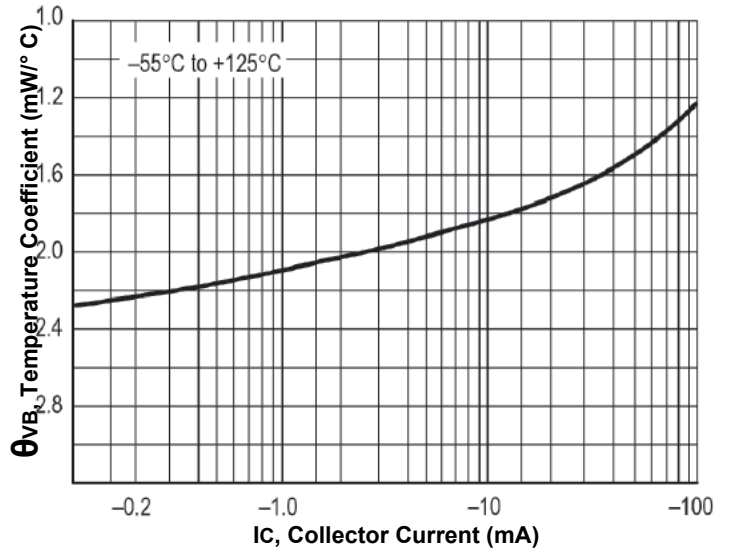


Fig.4- Base-Emitter Temperature Coefficient



Small Signal General Purpose Transistors (PNP)

BC556/BC557/BC558

Fig.5- Capacitance

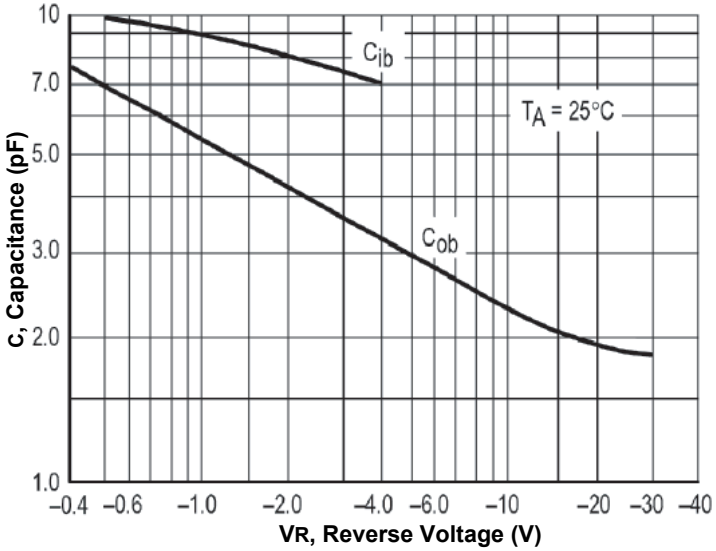
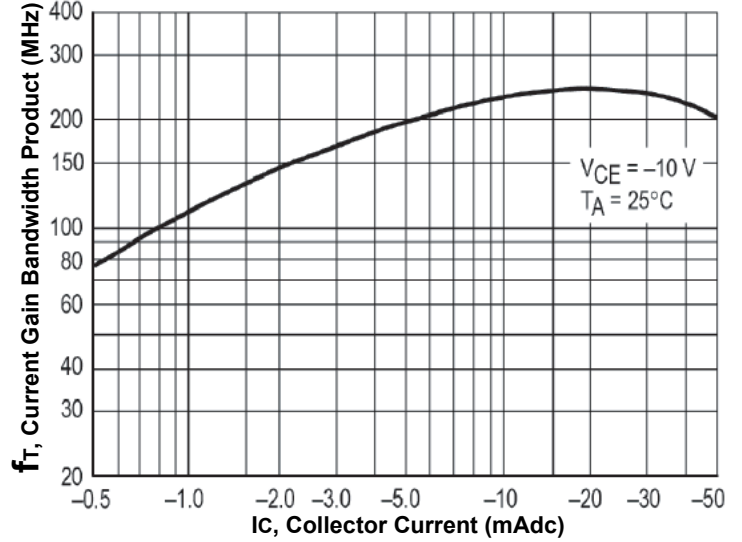


Fig.6- Current Gain Bandwidth Product



BC556

Fig.7- Normalized DC Current Gain

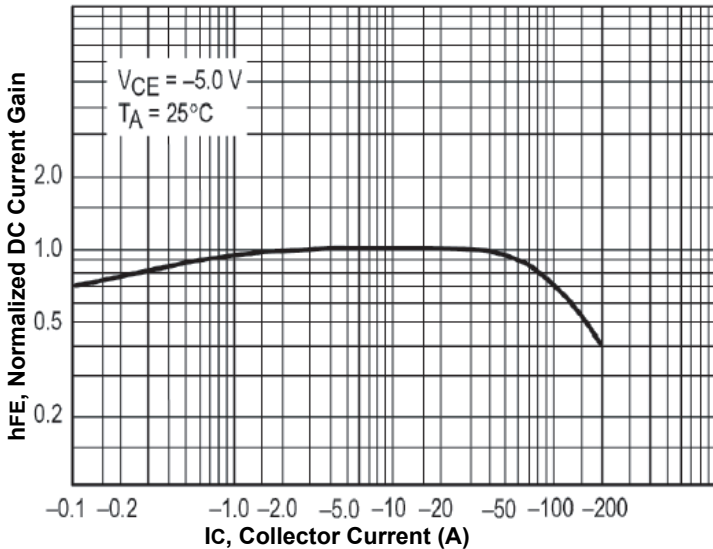
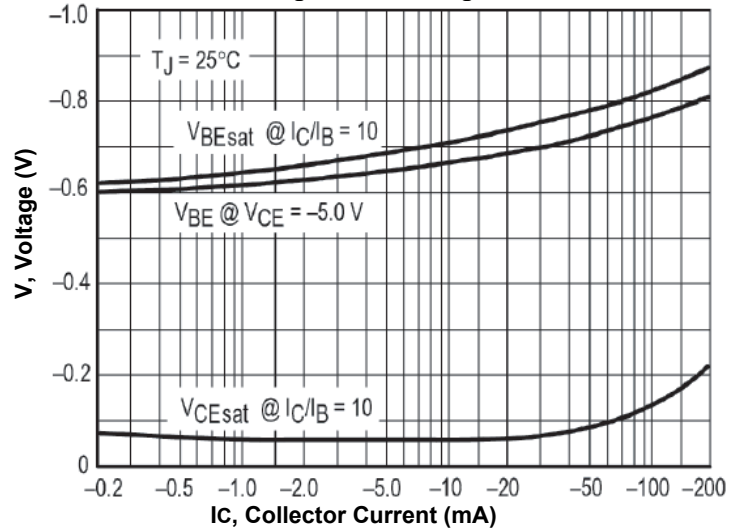


Fig.8- "On" Voltages



Small Signal General Purpose Transistors (PNP)

BC556/BC557/BC558

Fig.9- Collector Saturation Region

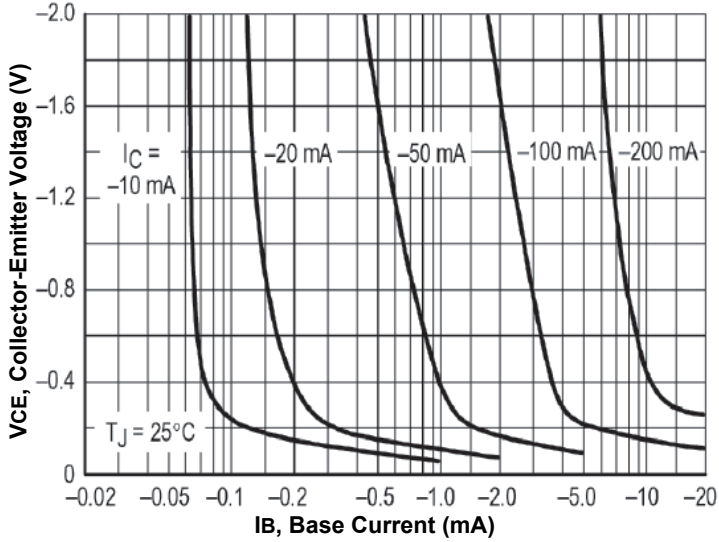


Fig.10- Base-Emitter Temperature Coefficient

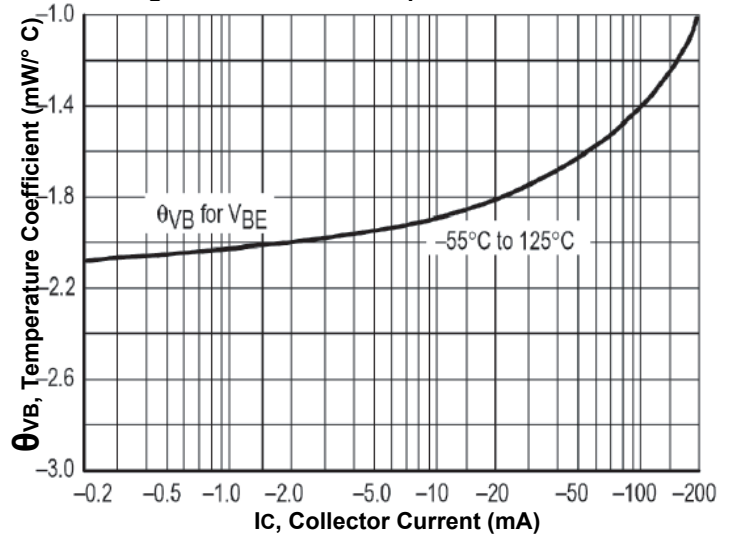


Fig.11- Capacitance

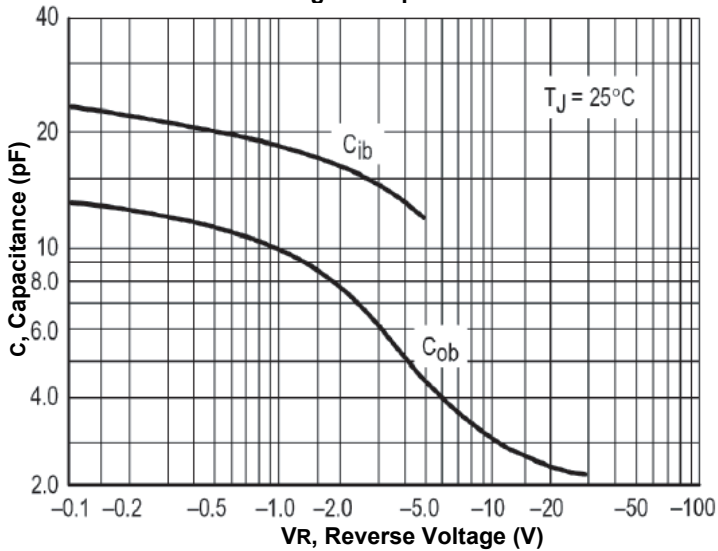
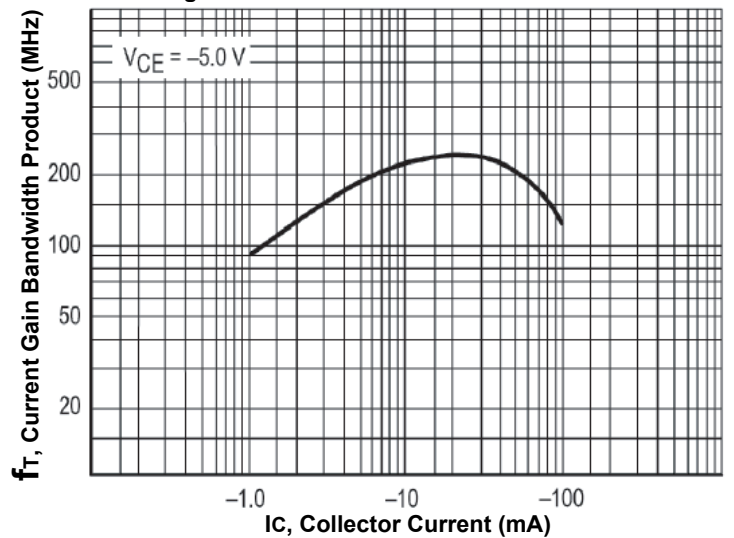


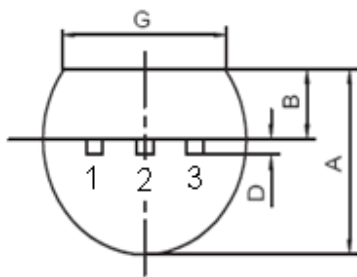
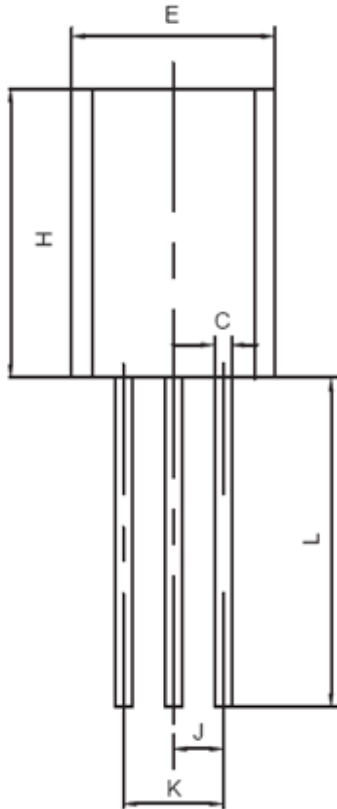
Fig.12- Current Gain Bandwidth Product



Small Signal General Purpose Transistors (PNP)

BC556/BC557/BC558

Dimensions in mm



TO-92		
Dim	Min	Max
A	3.30	3.70
B	1.10	1.40
C	0.38	0.55
D	0.36	0.51
E	4.40	4.70
G	3.43	-
H	4.30	4.70
J	1.270TYP	
K	2.44	2.64
L	14.10	14.50

1. EMITTER
2. BASE
3. COLLECTOR

TO-92

Small Signal General Purpose Transistors (PNP)

BC556/BC557/BC558

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED TAIWAN, TAIPEI

5F-2, NO. 77, SEC. 1, HSIN TAI WU ROAD, HSI-CHIH, TAIPEI HSIEN, TAIWAN R.O.C.

Tel: 886-2-2698-8878

Fax: 886-2-2698-8879

TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931