

GBC556

PNP SILICON TRANSISTOR

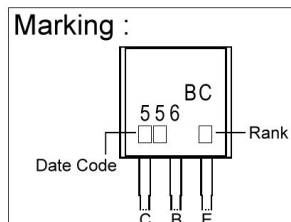
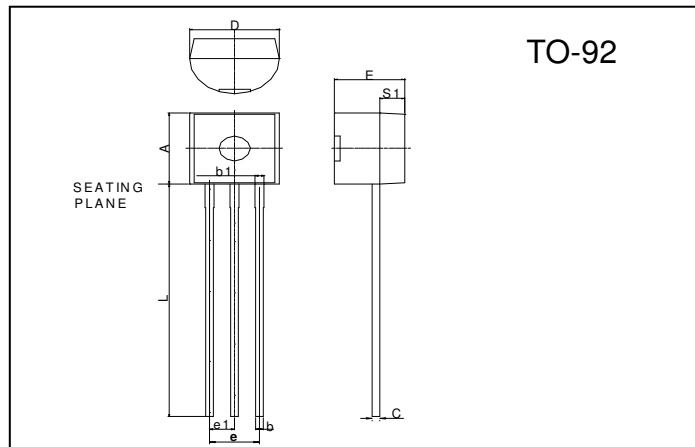
Description

The GBC556 is designed for drive and output-stages of audio amplifiers.

Features

- High DC Current Gain: 120~800 @VCE=-5V, IC=-2mA
- Complementary to GBC546

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings (TA=25°C)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V _{CB0}	-80	V
Collector to Emitter Voltage	V _{CE0}	-65	V
Emitter to Base Voltage	V _{EB0}	-5	V
Collector Current (continuous)	I _c	-100	mA
Total Device Dissipation @ TA =25°C	P _D	625	mW
Derate above 25°C		5.0	mW/°C
Total Device Dissipation @ Tc =25°C	P _D	1.5	W
Derate above 25°C		12	mW/°C
Operating and Storage Junction Temperature	T _J , T _{stg}	-55 ~ +150	°C
Thermal Resistance, Junction to Ambient	R _{θJA}	200	°C/W
Thermal Resistance, Junction to Case	R _{θJC}	83.3	°C/W

Electrical Characteristics (TA = 25°C unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	-80	-	-	V	I _C =-100μA, I _E =0
BV _{CE0}	-65	-	-	V	I _C =-2mA, I _B =0
BV _{EB0}	-5	-	-	V	I _E =-100μA, I _C =0
I _{CES}	-	-	-100	nA	V _{CE} =-40V, V _{BE} =0
*V _{CE(sat)1}	-	-0.075	-0.3	V	I _C =-10mA, I _B =-0.5mA
*V _{CE(sat)2}	-	-0.25	-0.65	V	I _C =-100mA, I _B =-5mA
*V _{BE(sat)1}	-	-0.7	-	V	I _C =-10mA, I _B =-0.5mA
*V _{BE(sat)2}	-	-1.0	-	V	I _C =-100mA, I _B =-5mA
*V _{BE(on)1}	-0.55	-0.62	-0.7	V	V _{CE} =-5V, I _C =-2mA
*V _{BE(on)2}	-	-0.7	-0.82	V	V _{CE} =-5V, I _C =-10mA
*h _{FE}	120	-	800		V _{CE} =-5V, I _C =-2mA
f _T	-	280	-	MHz	V _{CE} =-5V, I _C =-10mA, f=100MHz
C _{ob}	-	3.0	6.0	pF	V _{CB} =-10V, I _C =0, f=1MHz

*Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification Of hFE

Rank	A	B	C
Range	120 ~ 220	180 ~ 460	420 ~ 800

Characteristics Curve

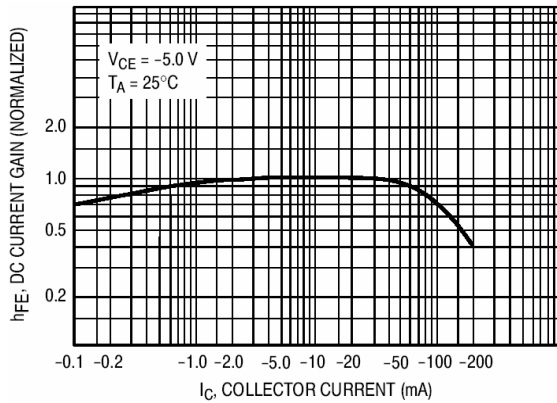


Fig 1. DC Current Gain

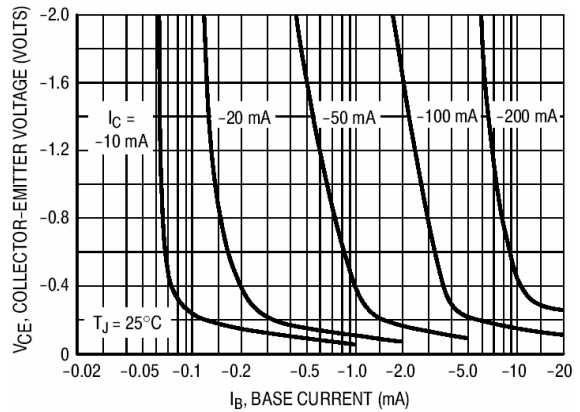


Fig 2. Collector Saturation Region

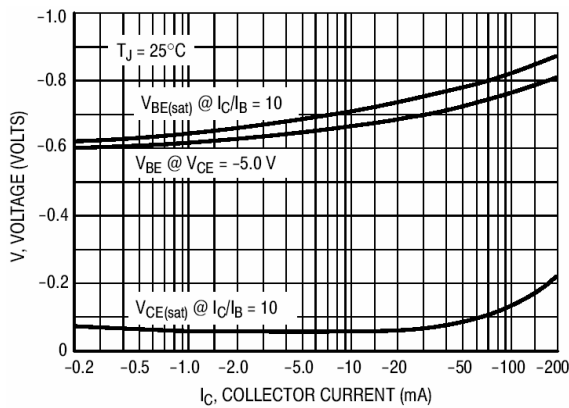


Fig 3. "On" Voltages

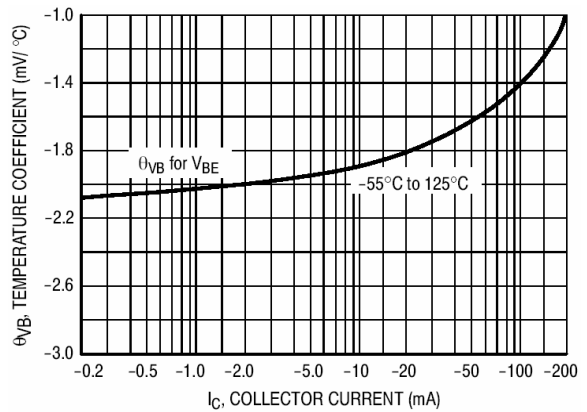


Fig 4. Temperature Coefficients

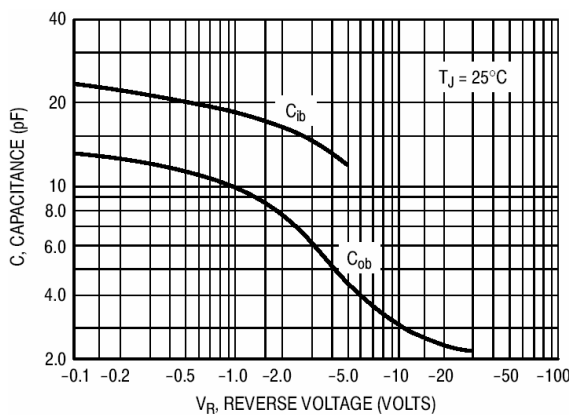


Fig 5. Capacitances

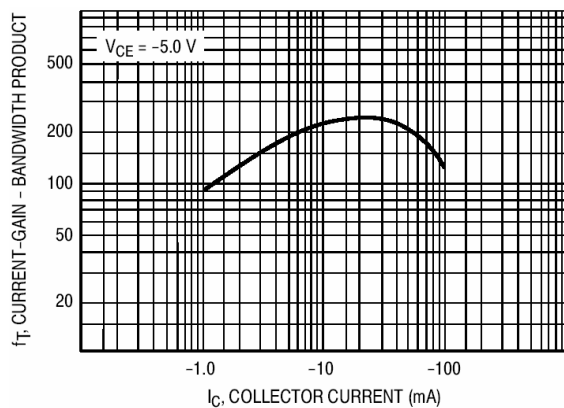


Fig 6. Bandwidth Product

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