GBC327

PNP SILICON TRANSISTOR

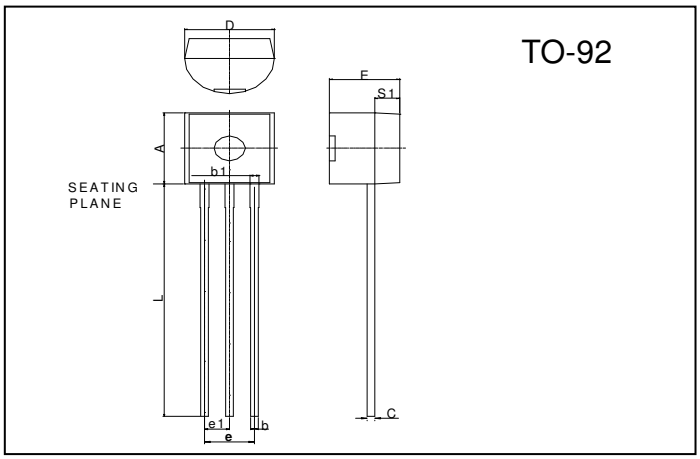
Description

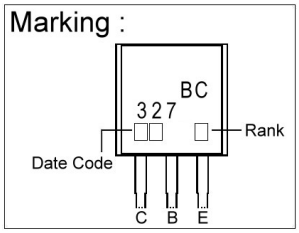
The GBC327 is designed for drive and output-stages of audio amplifiers.

Features

- High DC Current Gain: 100~630 @V_{CE}=-1V, I_C=-100mA
- Complementary to GBC337

Package Dimensions





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S_1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b_1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings (T_A=25℃)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current (continuous)	I_C	-800	mA
Total Device Dissipation @ T_A =25℃ Derate above 25℃	P_D	625 5.0	mW mW/℃
Total Device Dissipation @ T_C =25℃ Derate above 25℃	P_D	1.5 12	W mW/℃
Operating and Storage Junction Temperature	T_J, T_{stg}	-55 ~ +150	℃
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	200	℃/W
Thermal Resistance, Junction to Case	$R_{\theta JC}$	83.3	℃/W

Electrical Characteristics (T_A = 25℃ unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-50	-	-	V	I_C=-100uA, I_E=0
BV_{CEO}	-45	-	-	V	I_C=-10mA, I_B=0
BV_{CES}	-50	-	-	V	I_C=-100uA, I_E=0
BV_{EBO}	-5	-	-	V	I_E=-10uA, I_C=0
I_{CBO}	-	-	-100	nA	V_{CB}=-30V, I_E=0
I_{CES}	-	-	-100	nA	V_{CE}=-45V, V_{BE}=0
I_{EBO}	-	-	-100	nA	V_{EB}=-4V, I_C=0
*$V_{CE(sat)}$	-	-	-0.7	V	I_C=-500mA, I_B=-50mA
*$V_{BE(on)}$	-	-	-1.2	V	V_{CE}=-1V, I_C=-300mA
*h_{FE}1	100	-	630		V_{CE}=-1V, I_C=-100mA
*h_{FE}2	40	-	-		V_{CE}=-1V, I_C=-300mA
fT	-	260	-	MHz	V_{CE}=-5V, I_C=-10mA, f=100MHz
Cob	-	11	-	pF	V_{CB}=-10V, I_E=0, f=1MHz

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

Classification Of h_{FE}1

Rank	A	B	C
Range	100 ~ 250	160 ~ 400	250 ~ 630

Characteristics Curve

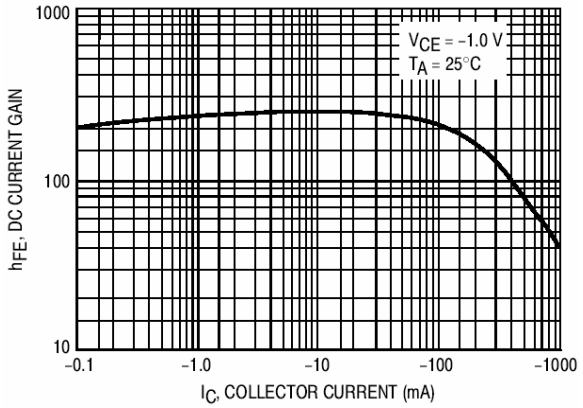


Fig 1. DC Current Gain

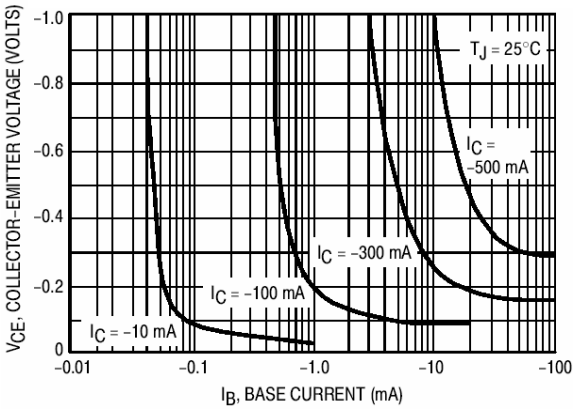


Fig 2. Saturation Region

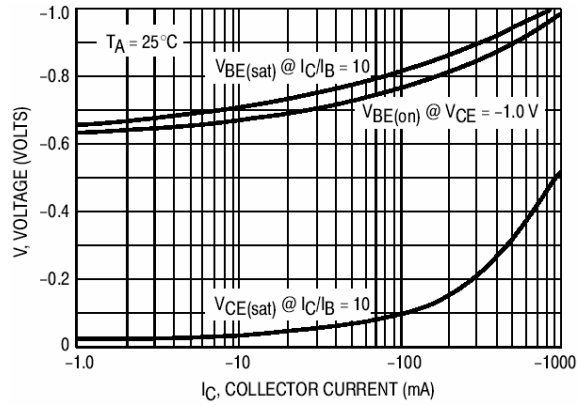


Fig 3. "On" Voltages

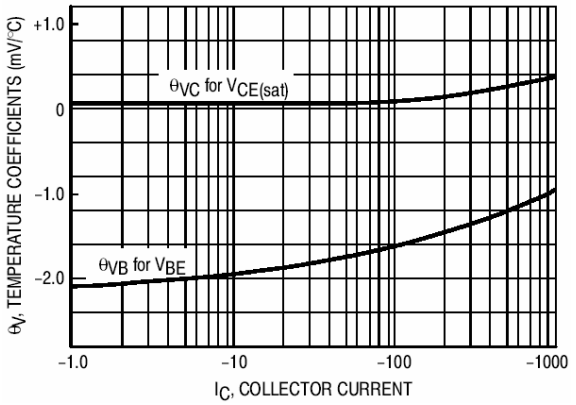


Fig 4. Temperature Coefficients

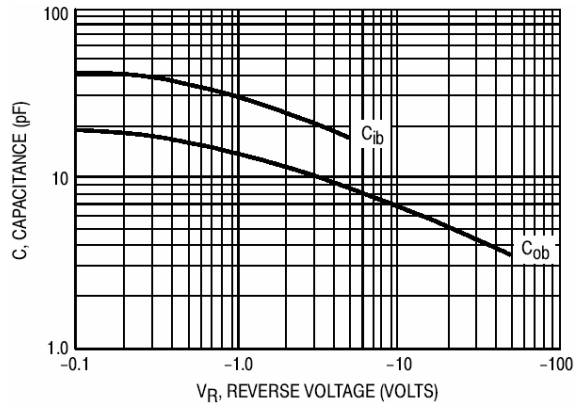


Fig 5. Capacitances

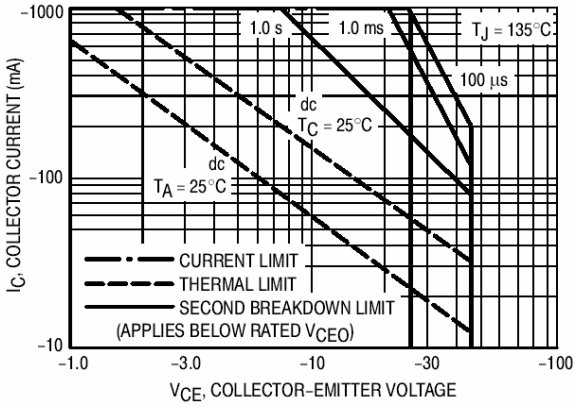


Fig 6. Safe Operating Area

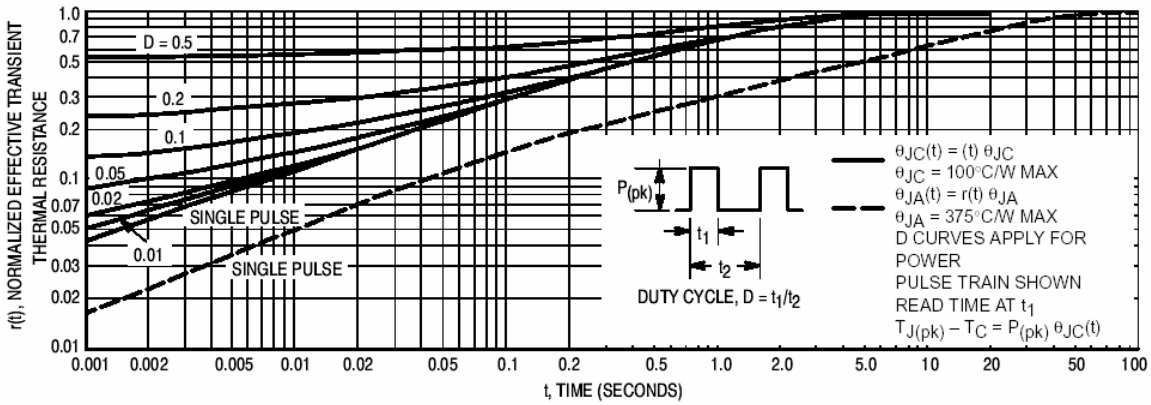


Fig 7. Thermal Response

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