



HBC327

PNP EPITAXIAL PLANAR TRANSISTOR

Description

This HBC327 is designed for driver and output-stages of audio amplifiers.

Features

- High DC Current Gain: 100-600 at $I_C=100\text{mA}$, $V_{CE}=1\text{V}$
- Complementary to HBC337

Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation ($T_a=25^\circ\text{C}$) 625 mW
- Maximum Voltages and Currents ($T_a=25^\circ\text{C}$)
 VCBO Collector to Base Voltage -50 V
 VCEO Collector to Emitter Voltage -45 V
 VEBO Emitter to Base Voltage -5 V
 IC Collector Current -500 mA

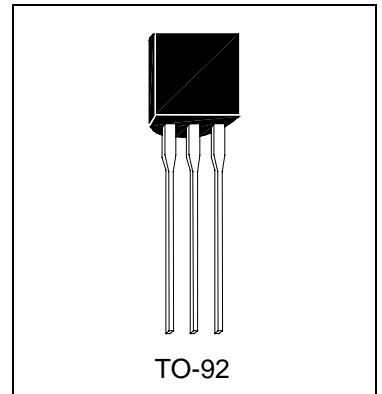
Characteristics ($T_a=25^\circ\text{C}$)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-50	-	-	V	$I_C=-100\mu\text{A}$, $I_E=0$
BVCEO	-45	-	-	V	$I_C=-10\text{mA}$, $I_B=0$
BVEBO	-5	-	-	V	$I_E=-100\mu\text{A}$, $I_C=0$
ICBO	-	-	-100	nA	$V_{CB}=-30\text{V}$, $I_E=0$
IEBO	-	-	-100	nA	$V_{EB}=-5\text{V}$, $I_C=0$
*hFE1	100	-	600		$V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$
*hFE2	40	-	-		$V_{CE}=-1\text{V}$, $I_C=-300\text{mA}$
*VCE(sat)1	-	-	-0.7	V	$I_C=-500\text{mA}$, $I_B=-50\text{mA}$
VBE(on)	-	-	-1.2	V	$V_{CE}=-1\text{V}$, $I_C=-300\text{mA}$,
fT	-	100	-	MHZ	$V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$, $f=100\text{MHZ}$
Cob	-	4	-	PF	$V_{CB}=-10\text{V}$, $f=1\text{MHZ}$, $I_C=0$

*Pulse Test: Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

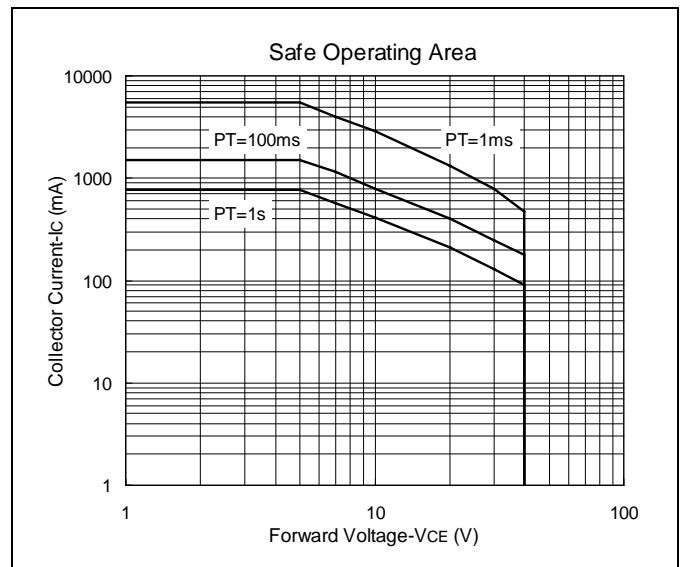
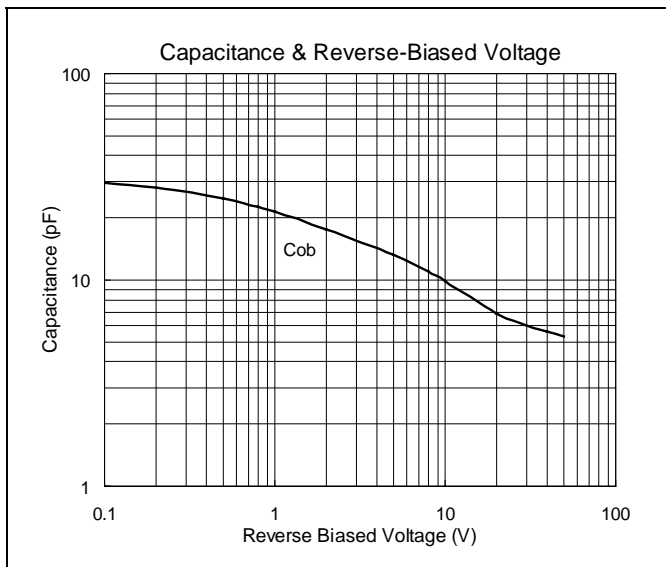
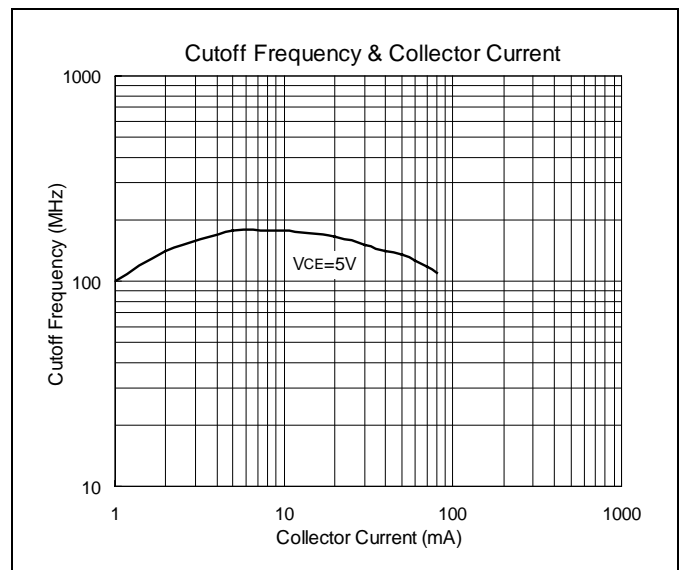
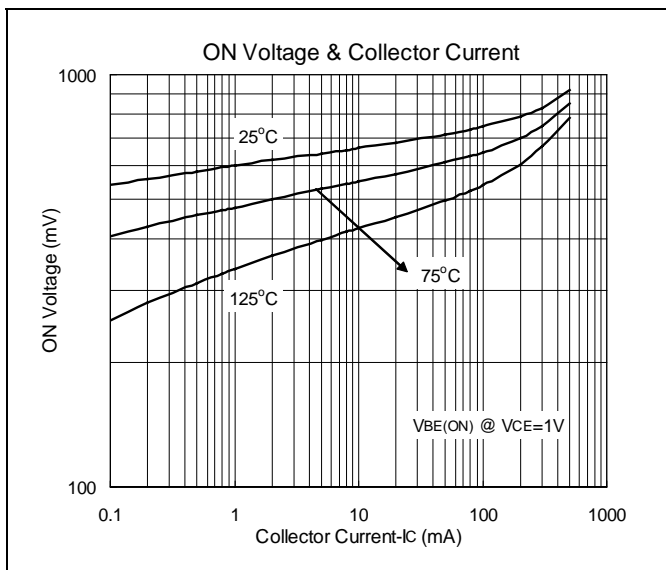
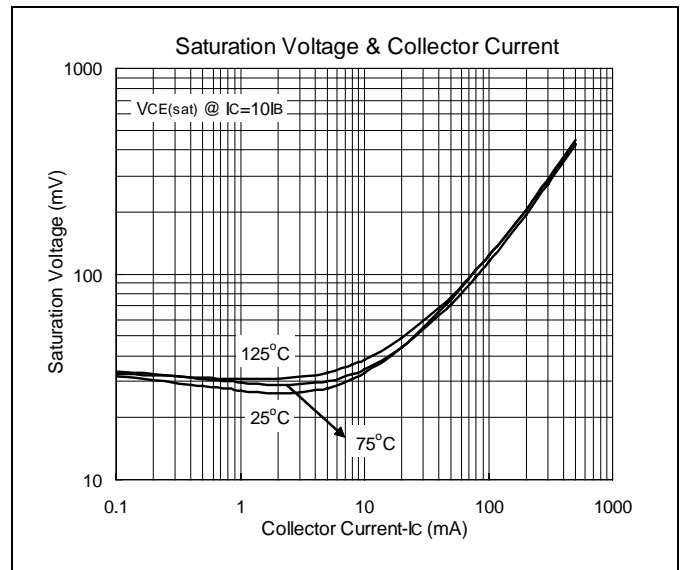
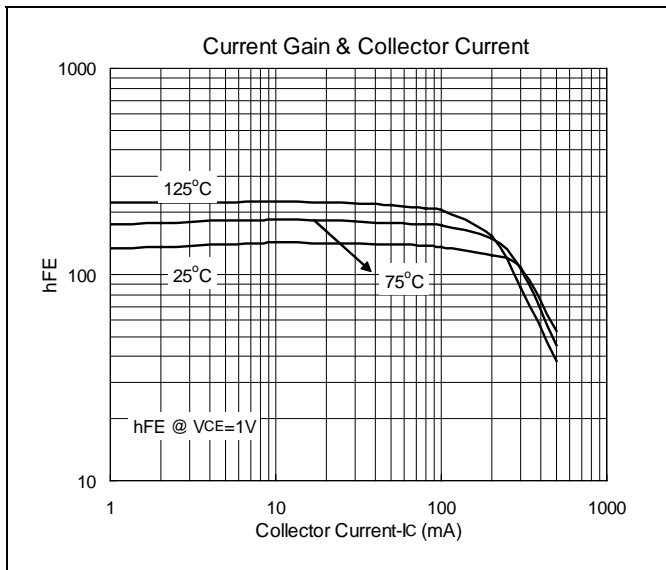
Classification of hFE1

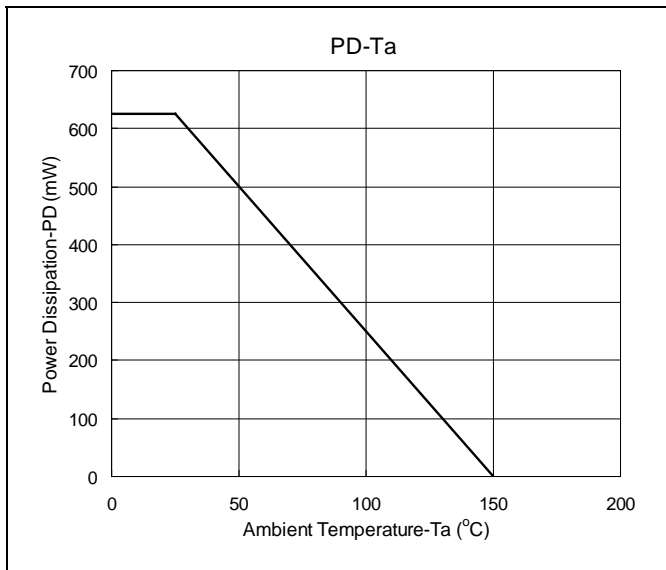
Rank	16	25	40
Range	100-250	160-400	250-600





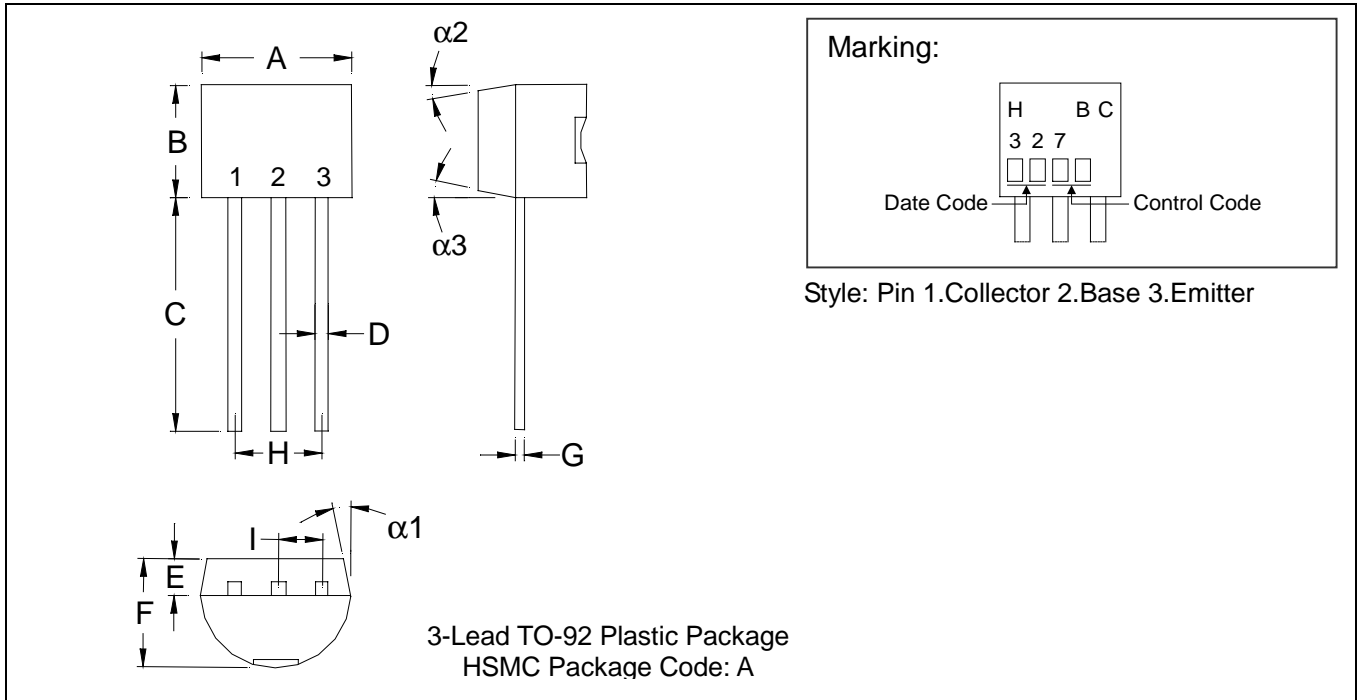
Characteristics Curve







TO-92 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*2°	-	*2°

- Notes:**
- 1.Dimension and tolerance based on our Spec. dated Apr. 25,1996.
 - 2.Controlling dimension: millimeters.
 - 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 - 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material:

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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