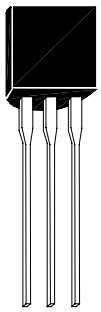
HBC337

NPN EPITAXIAL PLANAR TRANSISTOR



TO-92

Description

The HBC337 is designed for driver and output-stage of audio amplifiers.

Features

- High DC Current Gain: 100-600 at IC=100mA,VCE=1V
- Complementary to HBC327

Absolute Maximum Ratings

- Maximum Temperatures
  Storage Temperature ..... -55 ~ +150 °C
  Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) ..... 625 mW
- Maximum Voltages and Currents (Ta=25°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 ..... 800 mA

Characteristics (Ta=25°C)

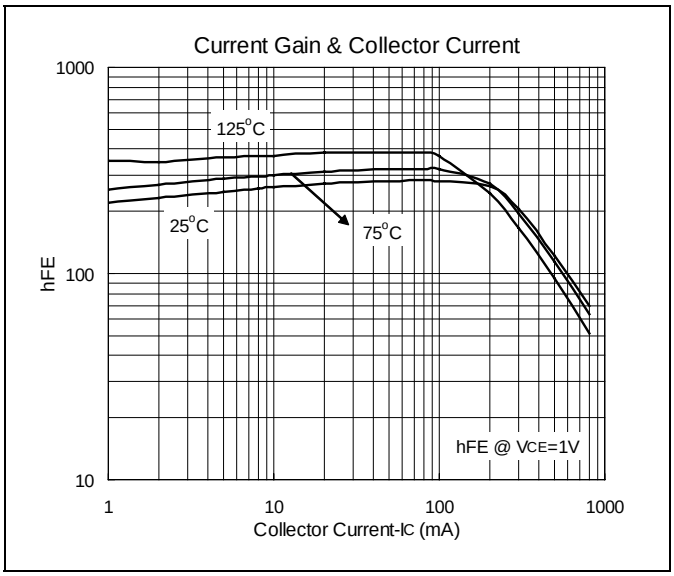
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	50	-	-	V	IC=100uA, IE=0
BVCEO	45	-	-	V	IC=10mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	100	nA	VCB=45V, IE=0
*VCE(sat)	-	-	0.7	V	IB=500mA, IB=50mA
VBE(on)	-	-	1.2	V	IC=300mA, VCE=1V
*hFE1	100	-	600		VCE=1V, IC=100mA
*hFE2	40	-	-		VCE=1V, IC=300mA
fT	-	210	-	MHZ	VCE=5V, IC=10mA, f=100MHZ
Cob	-	4	-	pF	VCB=10V, IE=0, f=1MHZ

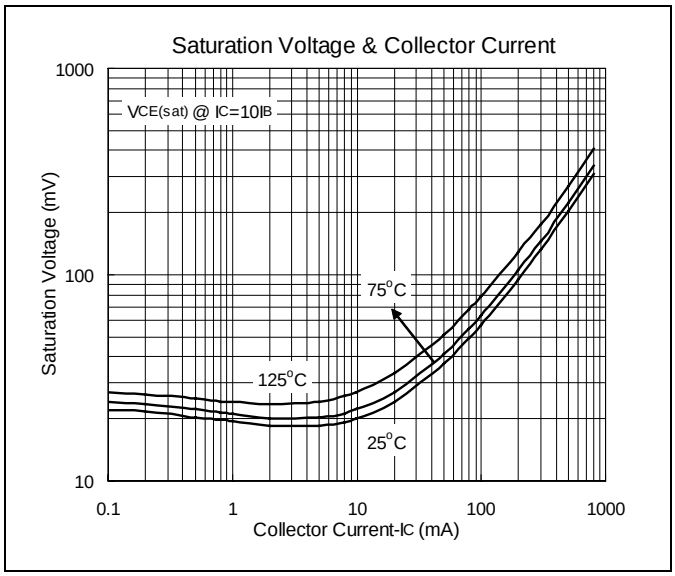
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

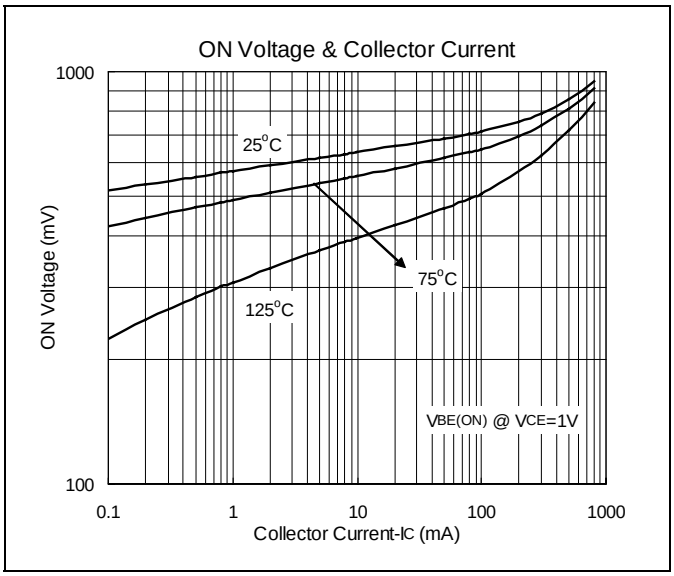
Classification of hFE1

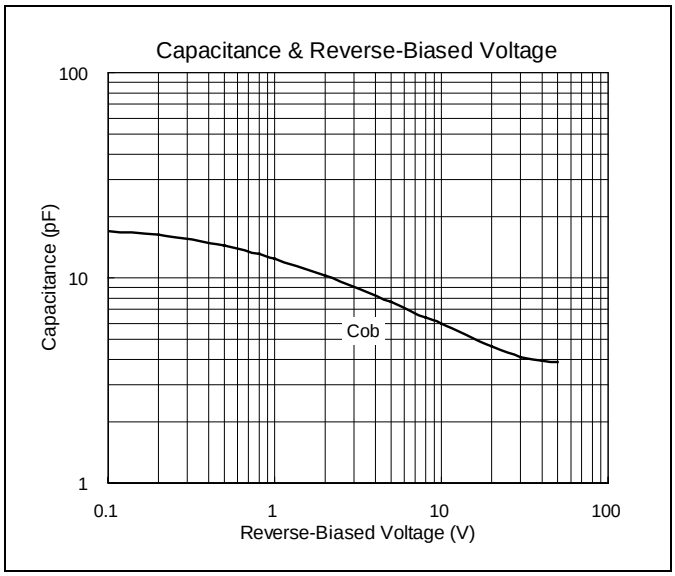
Rank	16	25	40
Range	100-250	160-400	250-600

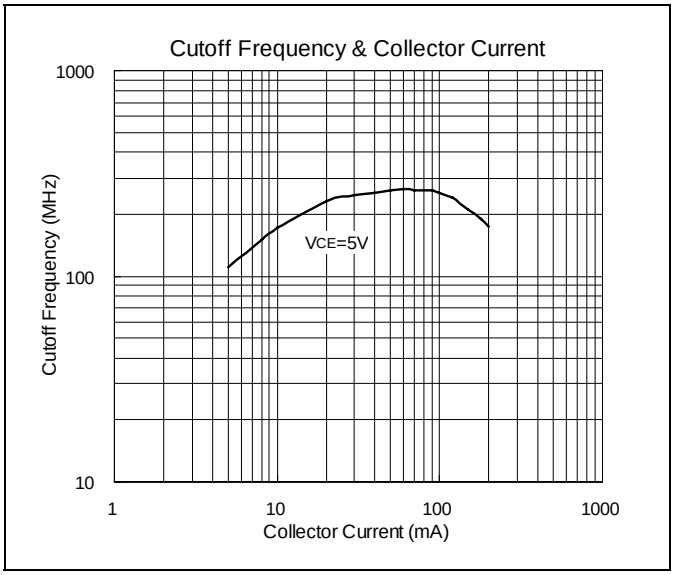
Characteristics Curve

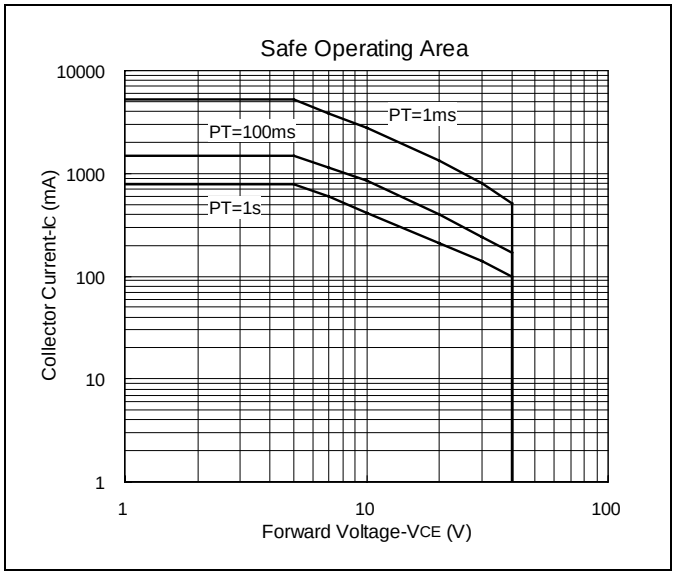


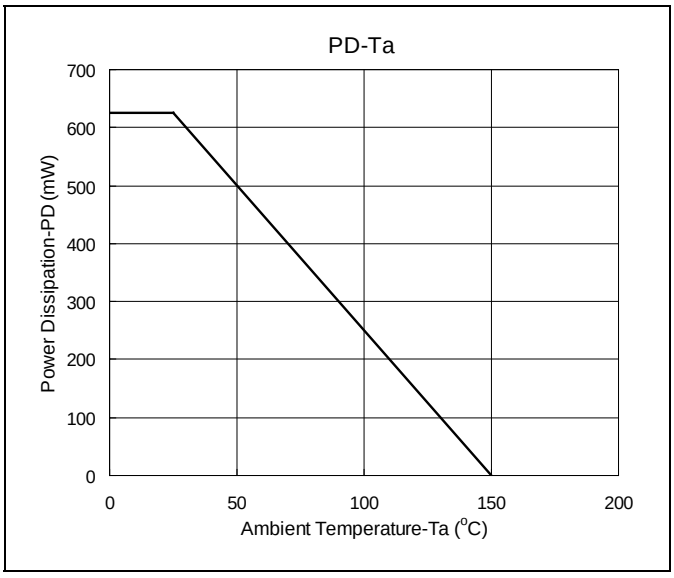




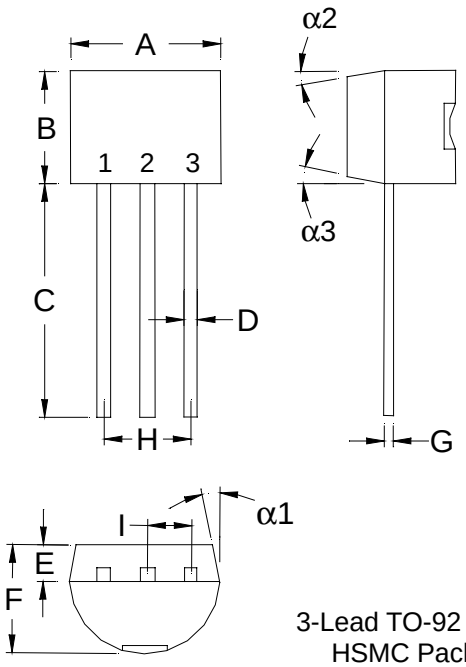




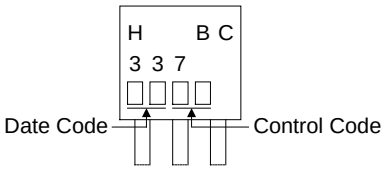



PD-Ta
Power Dissipation-PD (mW)
700
600
500
400
300
200
100
0
0
50
100
150
200
Ambient Temperature-Ta (°C)

TO-92 Dimension



Marking:



Style: Pin 1.Collector 2.Base 3.Emitter

3-Lead TO-92 Plastic Package
HSMC Package Code: A

*: 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	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*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

Head Office And Factory:

- **Head Office** (Hi-Sincerity Microelectronics Corp.): 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
  Tel: 886-2-25212056 Fax: 886-2-25632712, 25368454
- **Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
  Tel: 886-3-5983621~5 Fax: 886-3-5982931