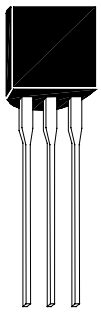
HBC546

NPN EPITAXIAL PLANAR TRANSISTOR



TO-92

Description

The HBC546 is primarily intended for use in driver stage of audio amplifiers.

Features

- High Breakdown Voltage: 65V
- High DC Current Gain: 110-800 at IC=2mA VCE=5V

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 ..... 80 V
  VCEO Collector to Emitter Voltage ..... 65 V
  VEBO Emitter to Base Voltage ..... 6 V
  IC Collector Current ..... 100 mA

Characteristics (Ta=25°C)

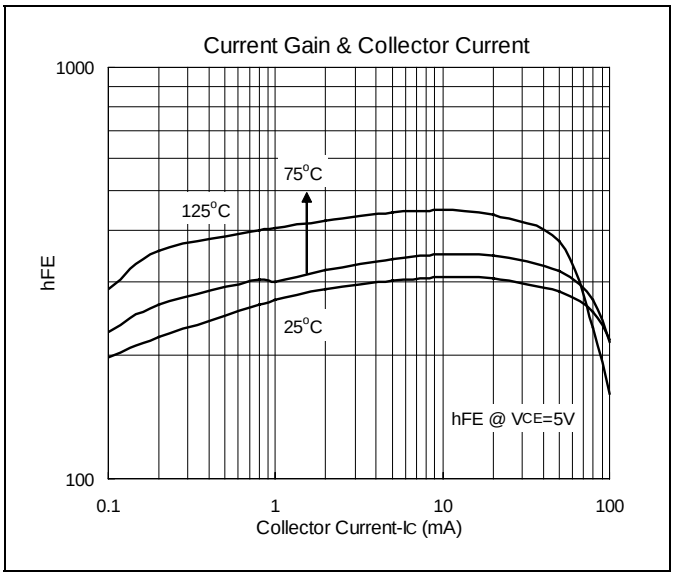
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	80	-	-	V	IC=100uA, IE=0
BVCEO	65	-	-	V	IC=1mA, IB=0
BVEBO	6	-	-	V	IE=10uA, IC=0
ICBO	-	-	15	nA	VCB=30V, IE=0
VBE(on)1	-	-	770	mV	IC=10mA, VCE=5V
VBE(on)2	580	-	700	mV	IC=2mA, VCE=5V
*VCE(sat)1	-	-	250	mV	IC=10mA, IB=0.5mA
*VCE(sat)2	-	-	600	mV	IC=100mA, IB=5mA
*VBE(sat)1	-	700	-	mV	IC=10mA, IB=0.5mA
*VBE(sat)2	-	900	-	mV	IC=100mA, IB=5mA
*hFE	110	-	800		VCE=5V, IC=2mA
fT	-	300		MHz	VCE=5V, IC=10mA, f=100MHz
Cob	-	-	4.5	PF	VCB=10V, IE=0, f=1MHz

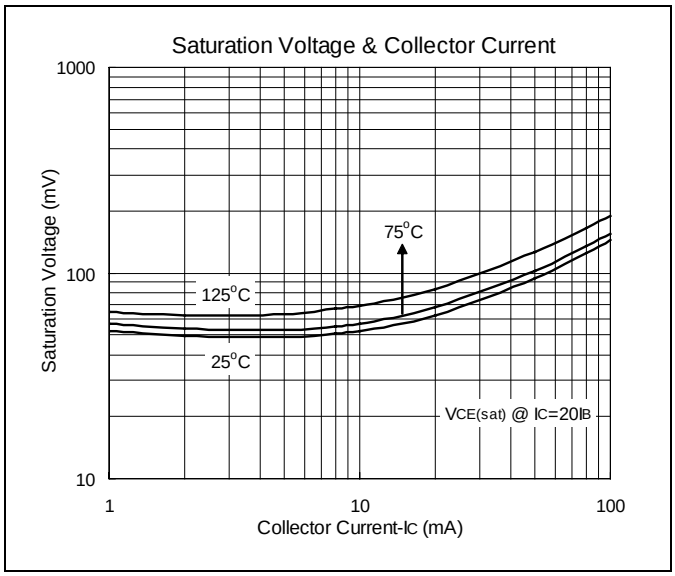
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

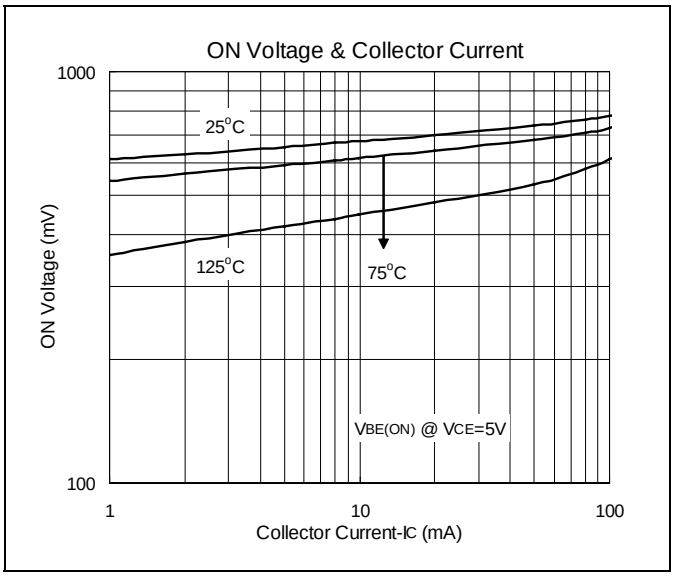
Classification of hFE

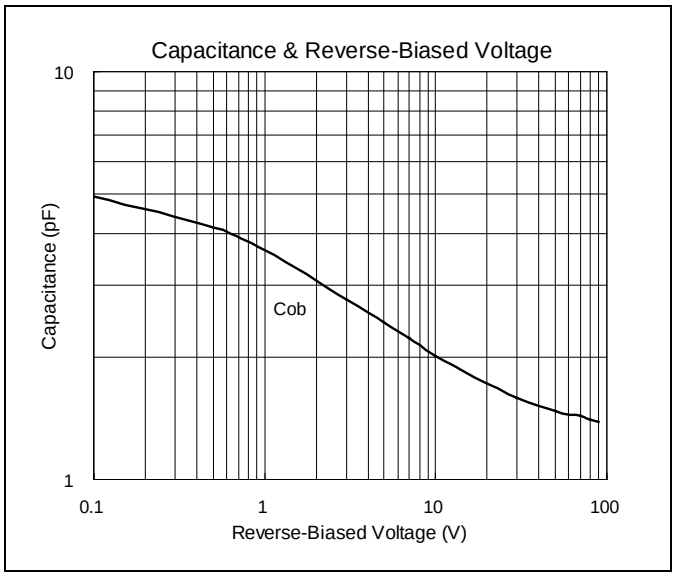
Rank	A	B	C
Range	110-220	200-450	420-800

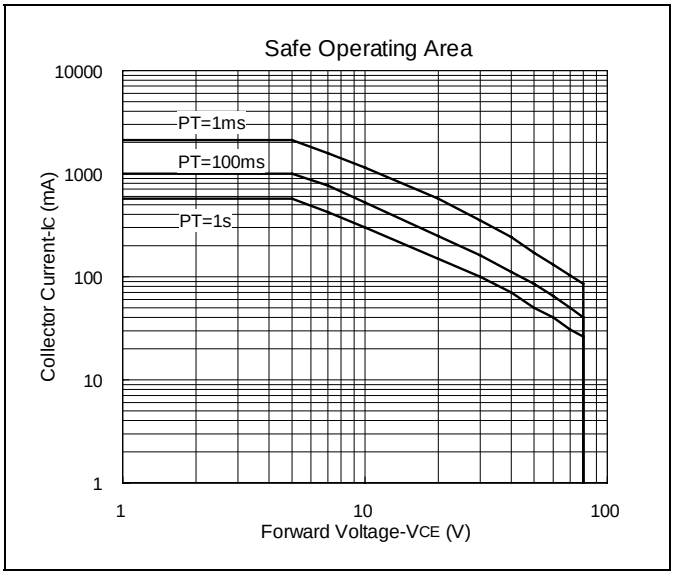
Characteristics Curve

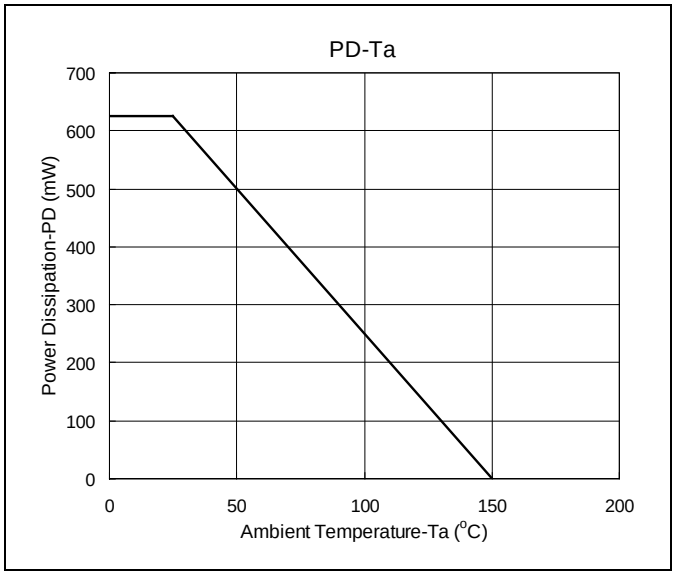




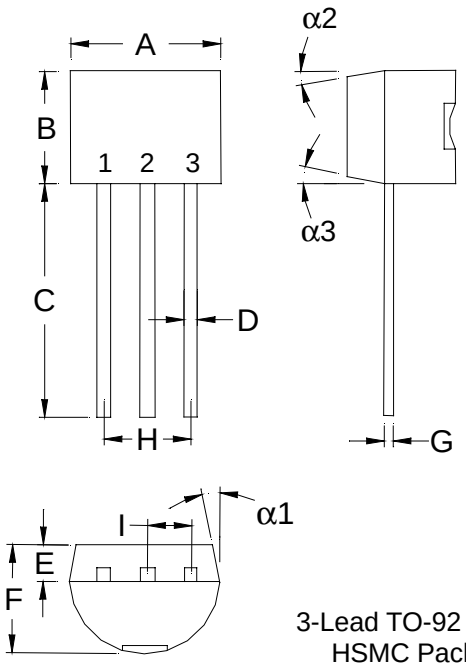




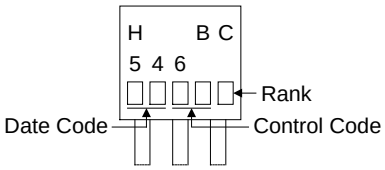




TO-92 Dimension



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:

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