



# HPH2369

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HPH2369 is designed for general purpose switching and amplifier applications.

## Features

- Low Collector Saturation Voltage
- High speed switching Transistor

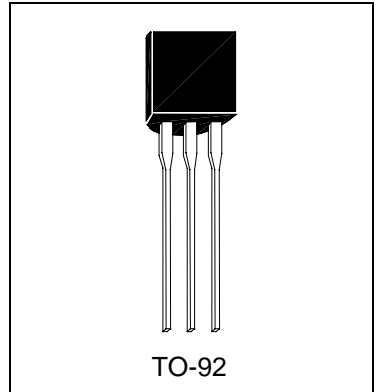
## Absolute Maximum Ratings

- 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 ..... 40 V  
 VCES Collector to Emitter Voltage ..... 40 V  
 VCEO Collector to Emitter Voltage ..... 15 V  
 VEBO Emitter to Base Voltage ..... 4.5 V  
 IC Collector Current ..... 500 mA

## Characteristics (Ta=25°C)

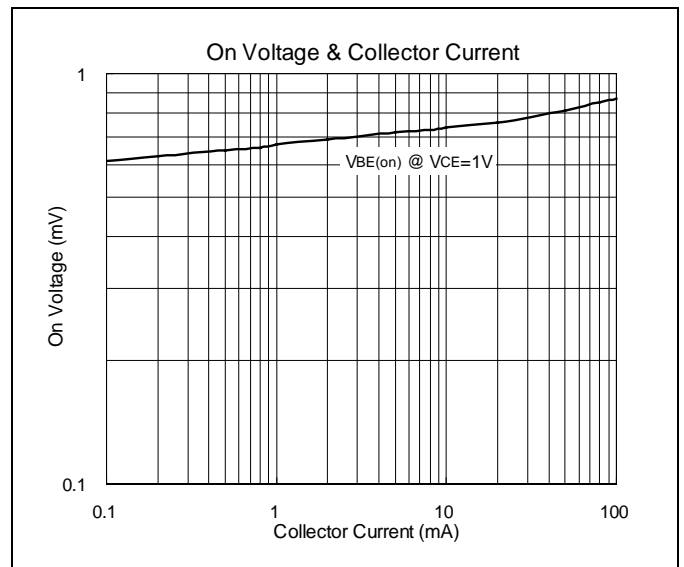
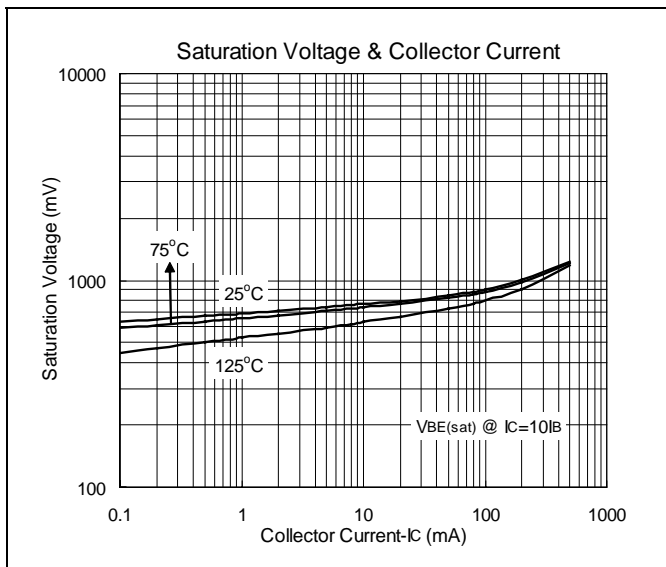
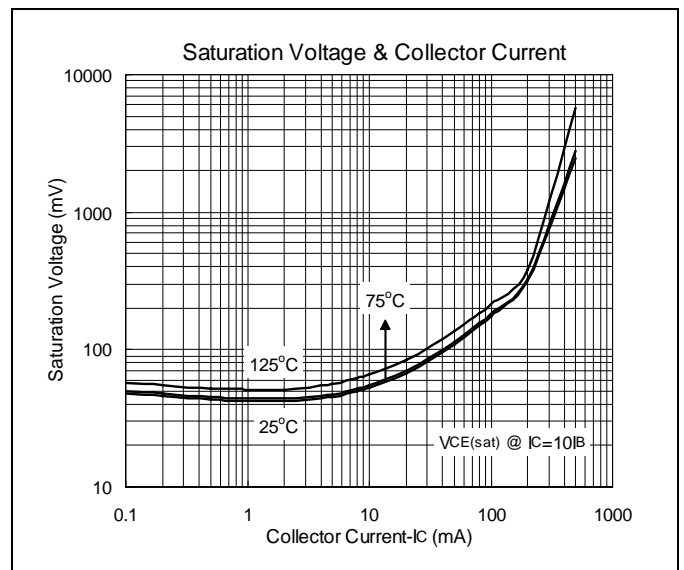
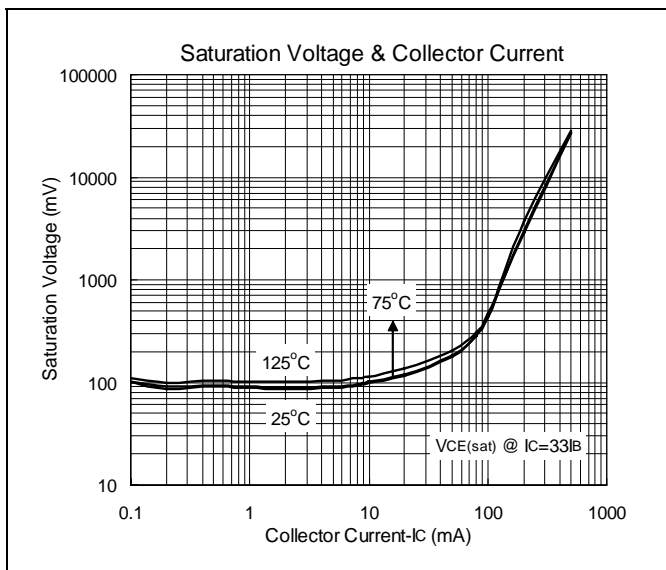
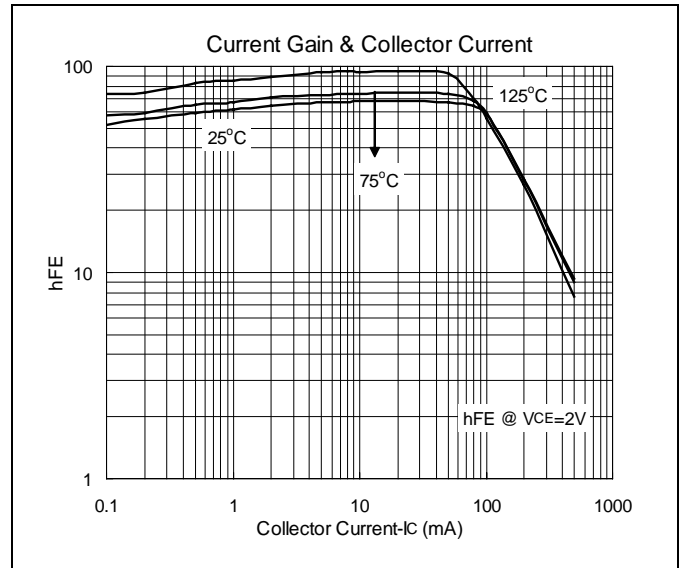
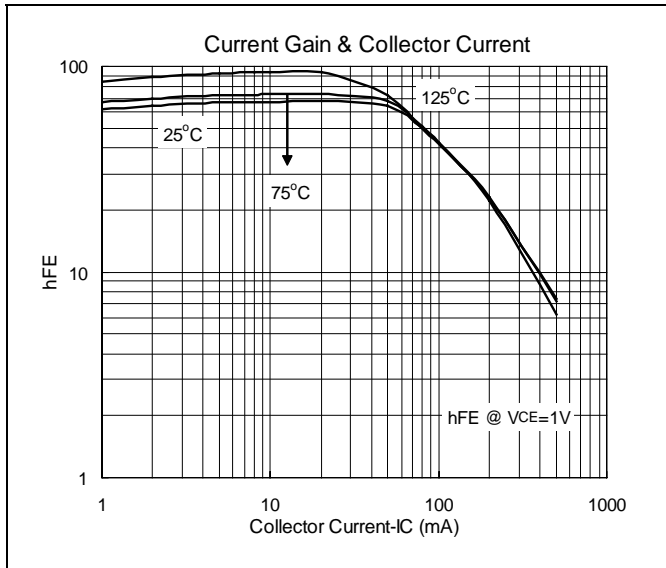
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA, IE=0
BVCEO	15	-	-	V	IC=10mA, IB=0
BVCES	40	-	-	V	IC=10uA, VBE=0
BVEBO	4.5	-	-	V	IE=10uA, IC=0
ICBO	-	-	400	nA	VCB=20V, IE=0
ICES	-	-	300	nA	VCE=25V, VBE=0
IEBO	-	-	100	nA	VEB=2V, IC=0
*VCE(sat)1	-	-	250	mV	IC=10mA, IB=1mA
*VCE(sat)2	-	-	300	mV	IC=10mA, IB=0.3mA
*VCE(sat)3	-	-	600	mV	IC=100mA, IB=10mA
*VBE(sat)1	700	-	850	mV	IC=10mA, IB=1mA
*VBE(sat)2	-	-	1.5	V	IC=100mA, IB=1mA
*hFE1	40	80	120		IC=10mA, VCE=1V
*hFE2	20	-	-		IC=100mA, VCE=2V
fT	500	-	-	MHz	IC=10mA, VCE=10V, f=100MHZ
Cob	-	-	4	pF	VCB=5V, f=1MHz, IE=0

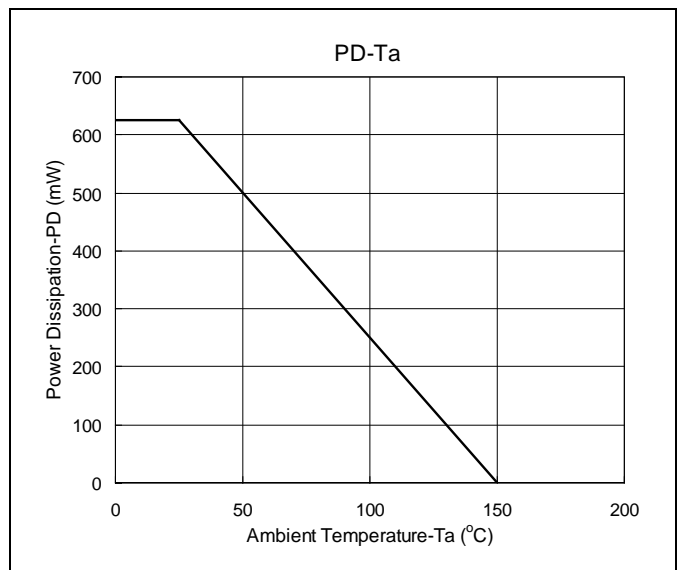
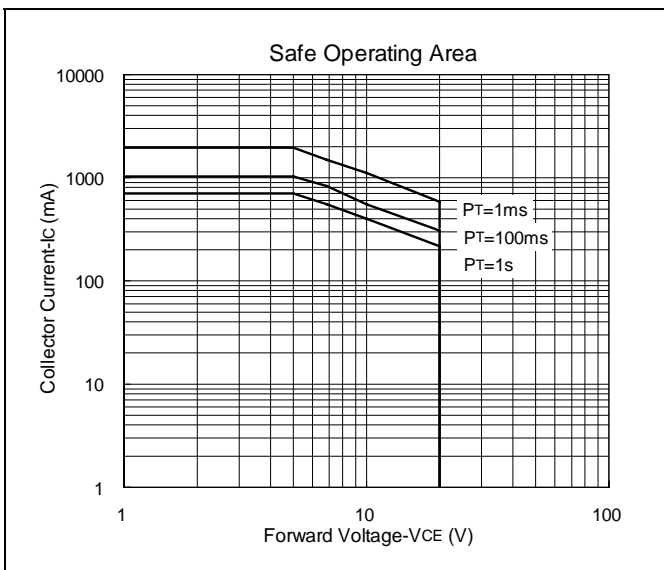
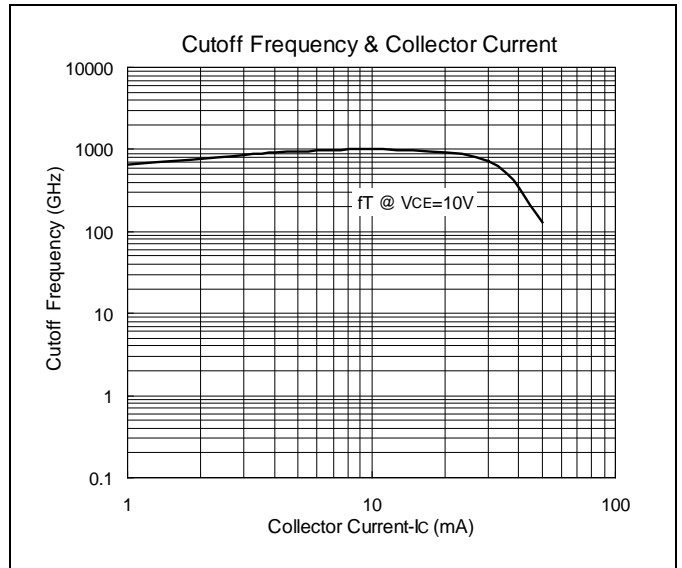
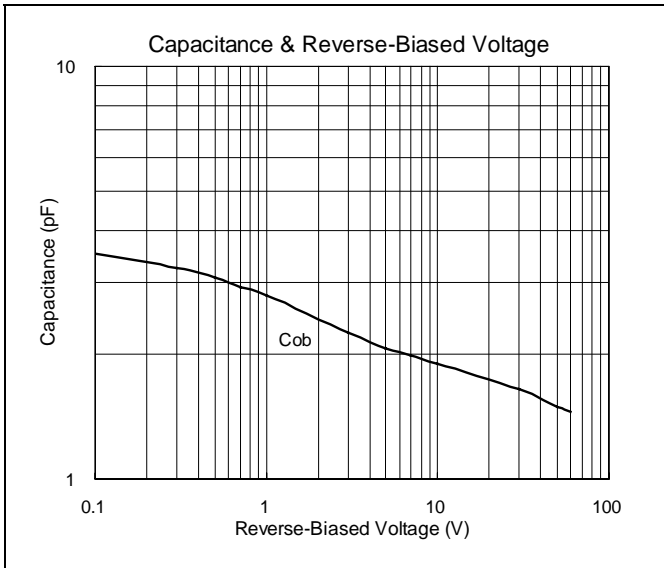
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%





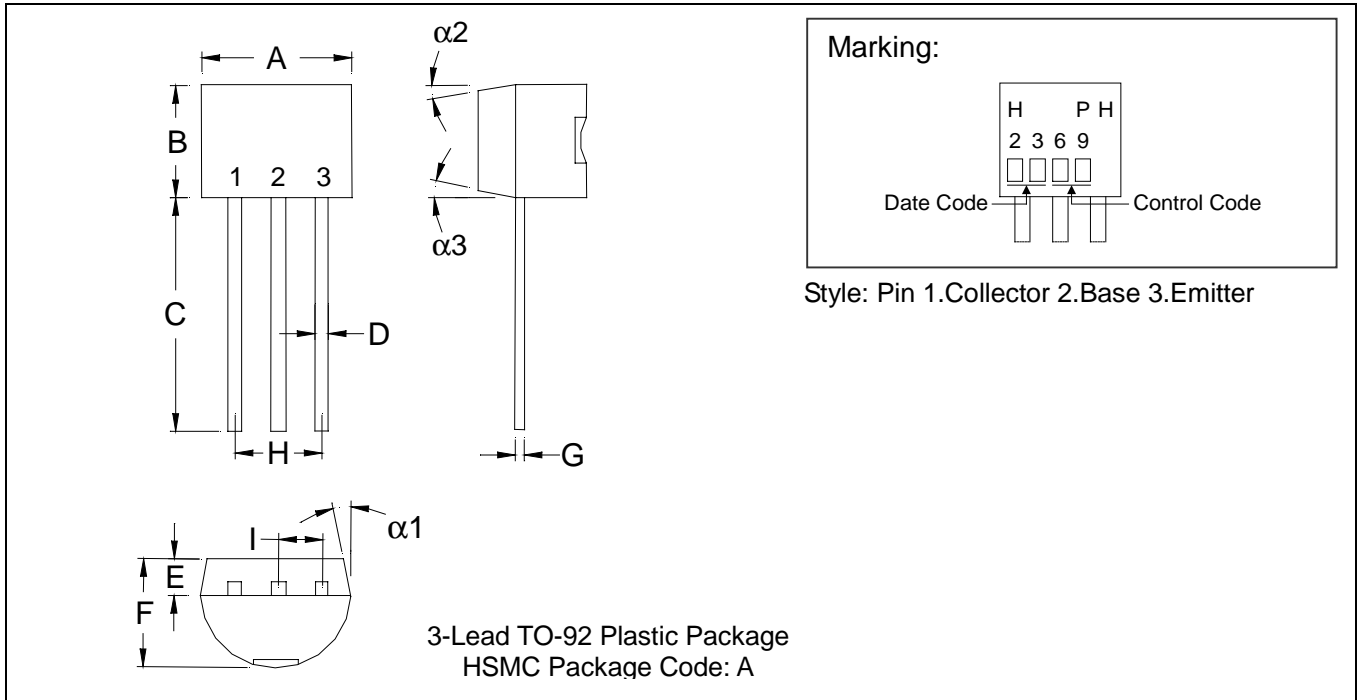
### Characteristics Curve







### 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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