

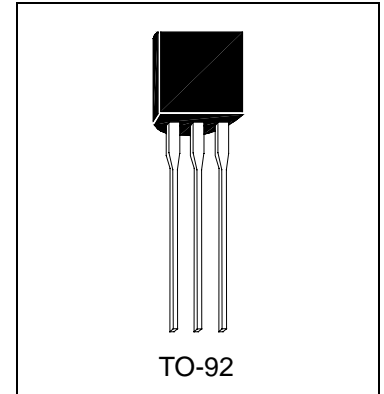


# HBC558

PNP EPITAXIAL PLANAR TRANSISTOR

## Description

The HBC558 is designed for switching and AF amplifier amplification suitable for automatic insertion in thick and thin-film circuits.



## Absolute Maximum Ratings

- Maximum Temperatures  
 Storage Temperature ..... -55 ~ +150 °C  
 Junction Temperature..... +150 °C
- Maximum Power Dissipation  
 Total Power Dissipation (Ta=25°C) ..... 500 mW
- Maximum Voltages and Currents (Ta=25°C)  
 VCBO Collector to Base Voltage ..... -30 V  
 VCEO Collector to Emitter Voltage..... -30 V  
 VEBO Emitter to Base Voltage..... -5 V  
 IC Collector Current..... -100 mA

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-30	-	-	V	IC=-100uA
BVCEO	-30	-	-	V	IC=-1mA
BVEBO	-5	-	-	V	IE=-10uA
ICBO	-	-	-15	nA	VCB=-30V
*VCE(sat)1	-	-90	-300	mV	IC=-10mA, IB=-0.5mA
*VCE(sat)2	-	-250	-650	mV	IC=-100mA, IB=-5mA
*VBE(sat)1	-	-700	-	mV	IC=-10mA, IB=-0.5mA
*VBE(sat)2	-	-900	-	mV	IC=-100mA, IB=-5mA
VBE(on)1	-600	-	-750	mV	VCE=-5V, IB=-2mA
VBE(on)2	-	-	-800	mV	VCE=-5V, IB=-10mA
*hFE	110	-	800		VCE=-5V, IC=-2mA
fT	-	150	-	MHz	VCE=-5V, IC=-10mA
Cob	-	-	6	pF	VCB=-10V, f=1MHz

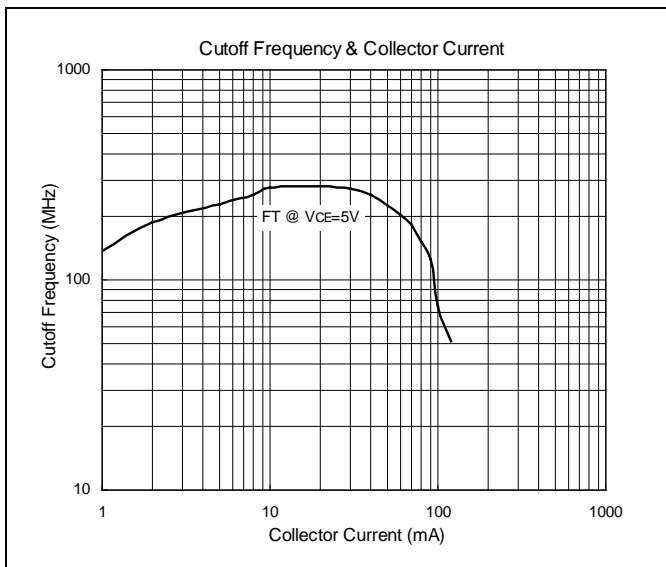
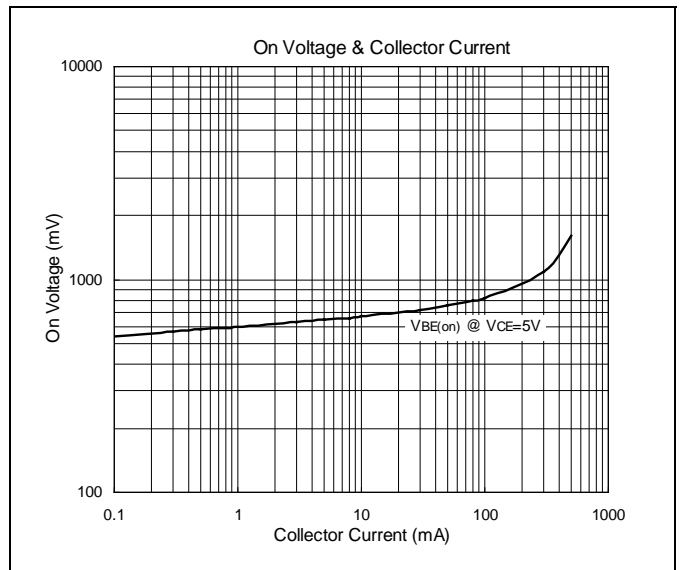
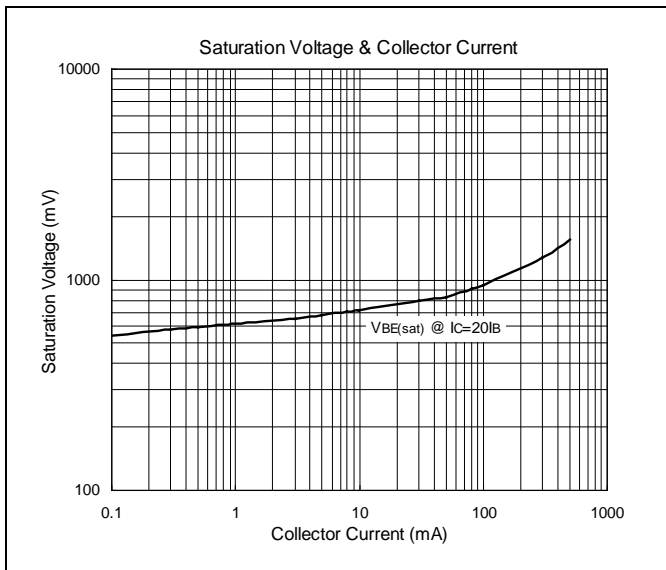
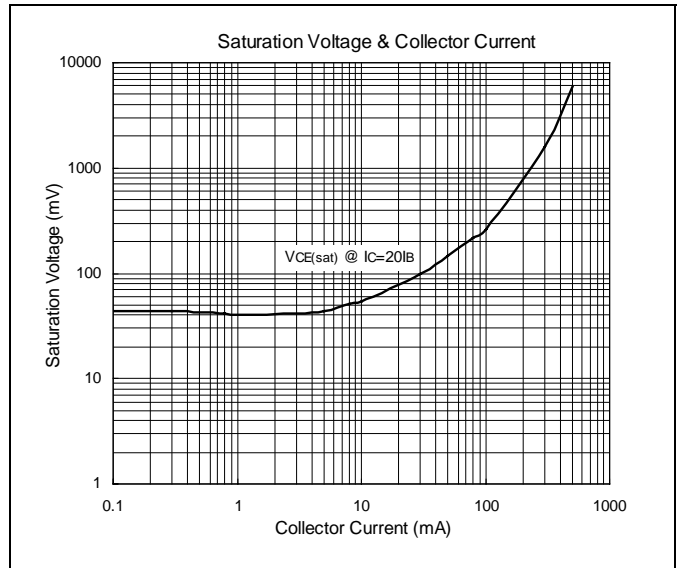
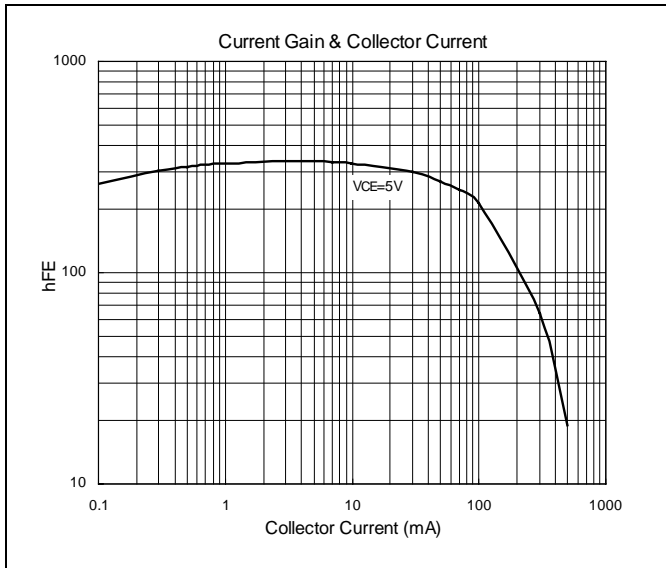
\*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

## Classification Of hFE

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

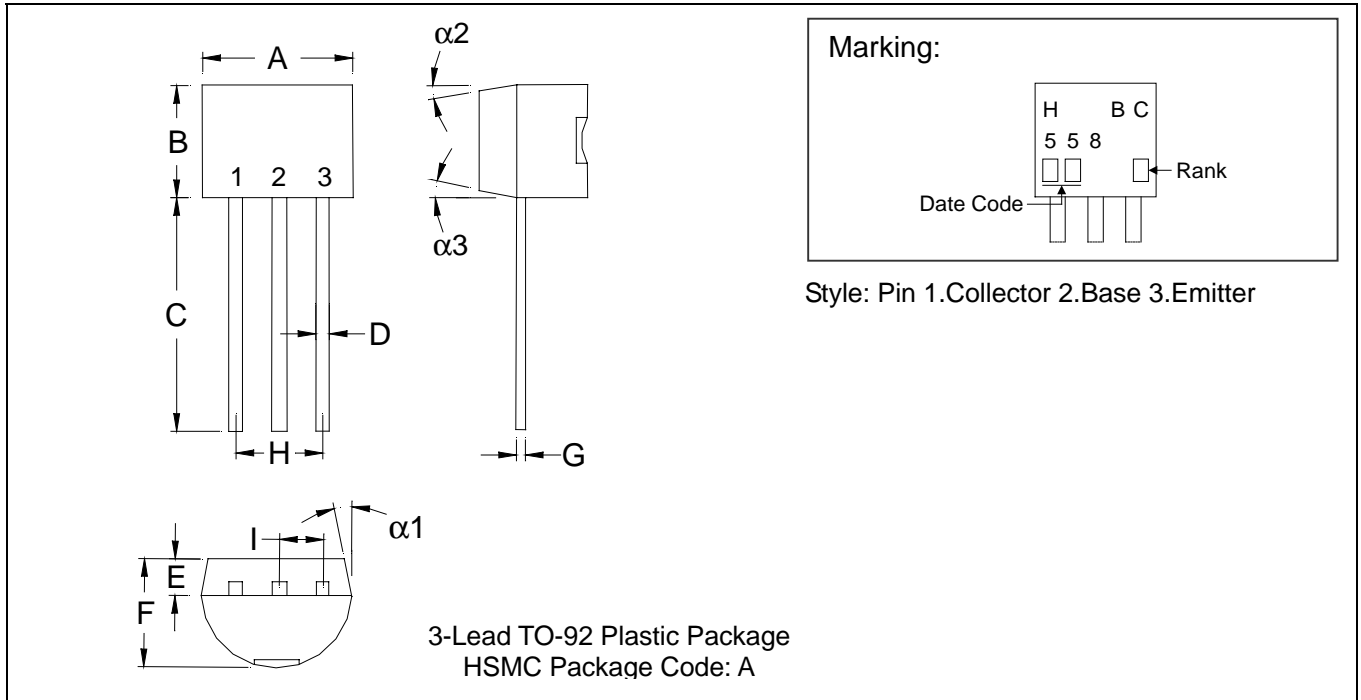


### Characteristics Curve





### 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

**Important Notice:**

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- **HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

**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