

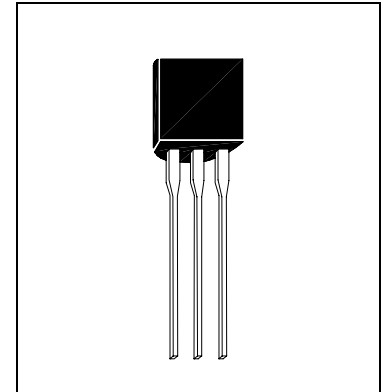


# HE8550

PNP EPITAXIAL PLANAR TRANSISTOR

## Description

The HE8550 is designed for use in 2W output amplifier of portable radios in class B push-pull operation.



## Absolute Maximum Ratings

- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  - Total Power Dissipation (Ta=25°C) ..... 1 W
- Maximum Voltages and Currents (Ta=25°C)
  - VCBO Collector to Base Voltage ..... -40 V
  - VCEO Collector to Emitter Voltage ..... -25 V
  - VEBO Emitter to Base Voltage ..... -6 V
  - IC Collector Current ..... -1.5 A
  - IB Base Current ..... -0.5 A

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-40	-	-	V	IC=-100uA, IE=0
BVCEO	-25	-	-	V	IC=-2mA, IB=0
BVEBO	-6	-	-	V	IE=-100uA, IC=0
ICBO	-	-	-100	nA	VCB=-35V, IE=0
IEBO	-	-	-100	nA	VEB=-6V, IC=0
*VCE(sat)	-	-	-0.5	V	IC=-0.8A, IB=-80mA
*VBE(sat)	-	-	-1.2	V	IC=-0.8A, IB=-80mA
VBE(on)	-	-	-1	V	VCE=-1V, IC=-10mA
*hFE1	45	-	-		VCE=-1V, IC=-5mA
*hFE2	85	-	500		VCE=-1V, IC=-100mA
*hFE3	40	-	-		VCE=-1V, IC=-800mA
fT	100	-	-	MHz	VCE=-10V, IC=-50mA, f=100MHz

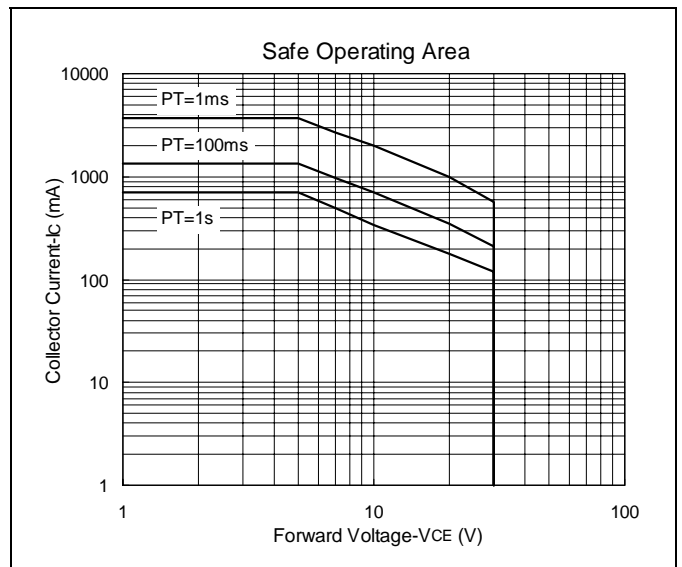
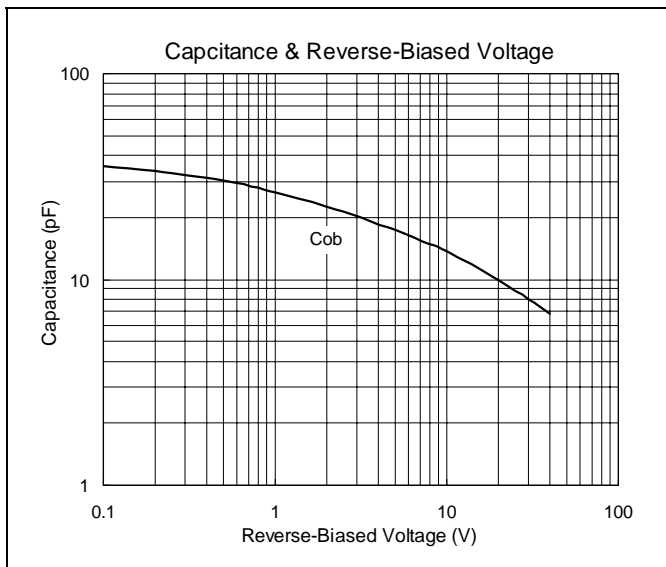
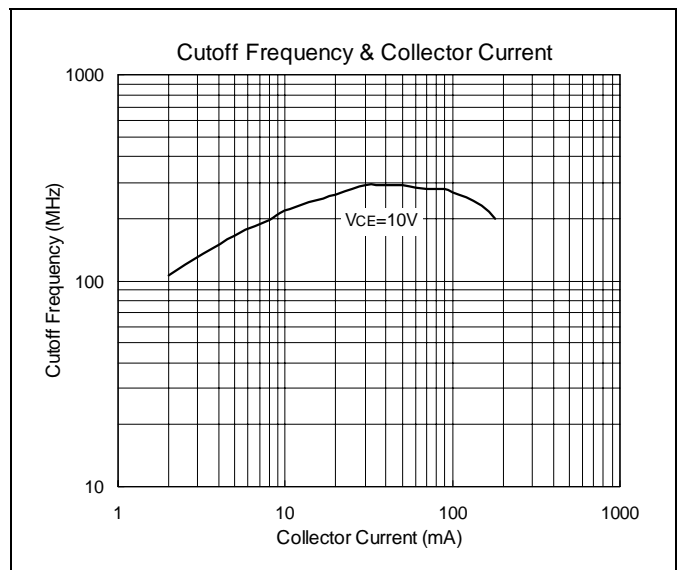
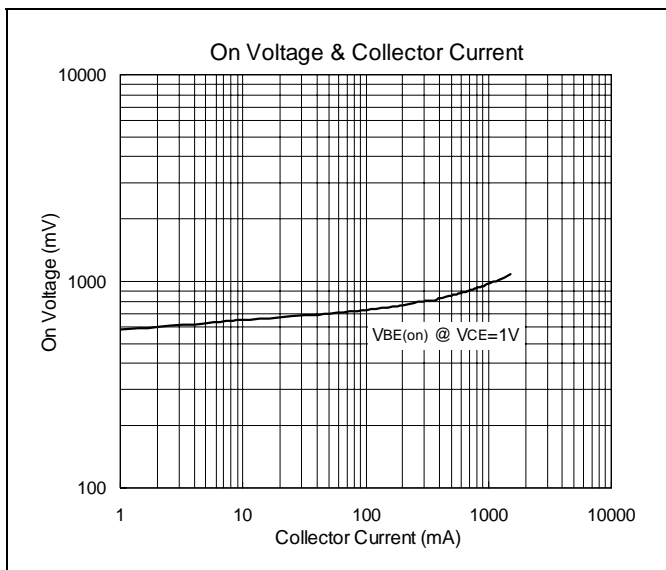
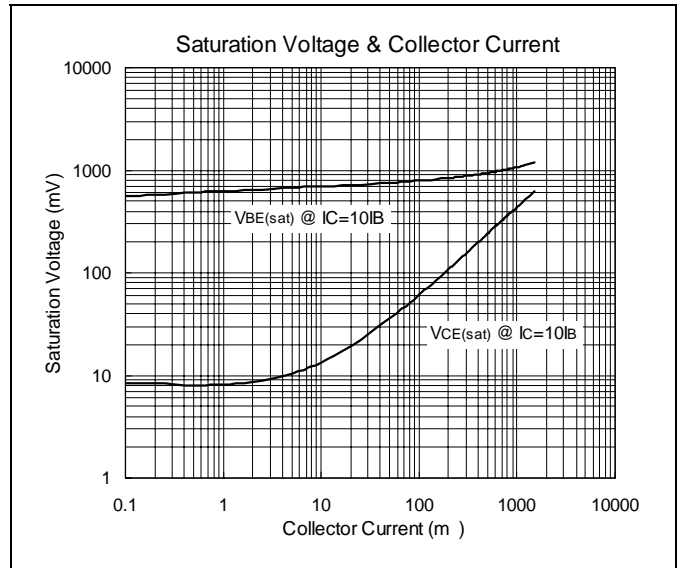
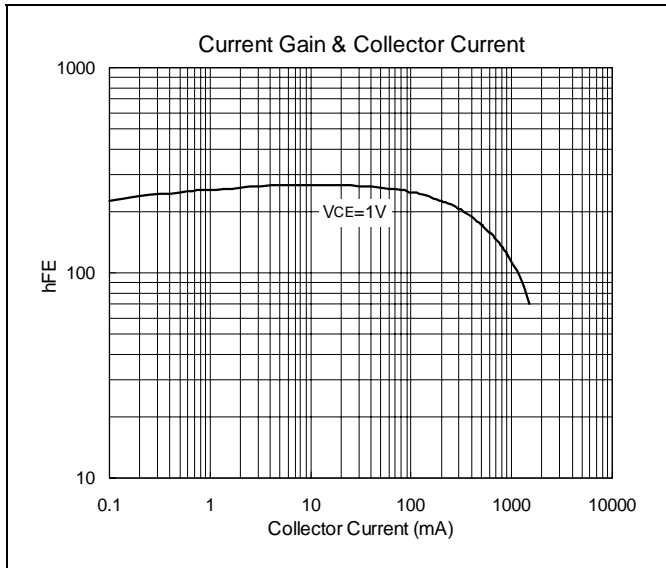
\*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

## Classification on hFE2

Rank	B	C	D	E
Range	85-160	120-200	160-320	250-500

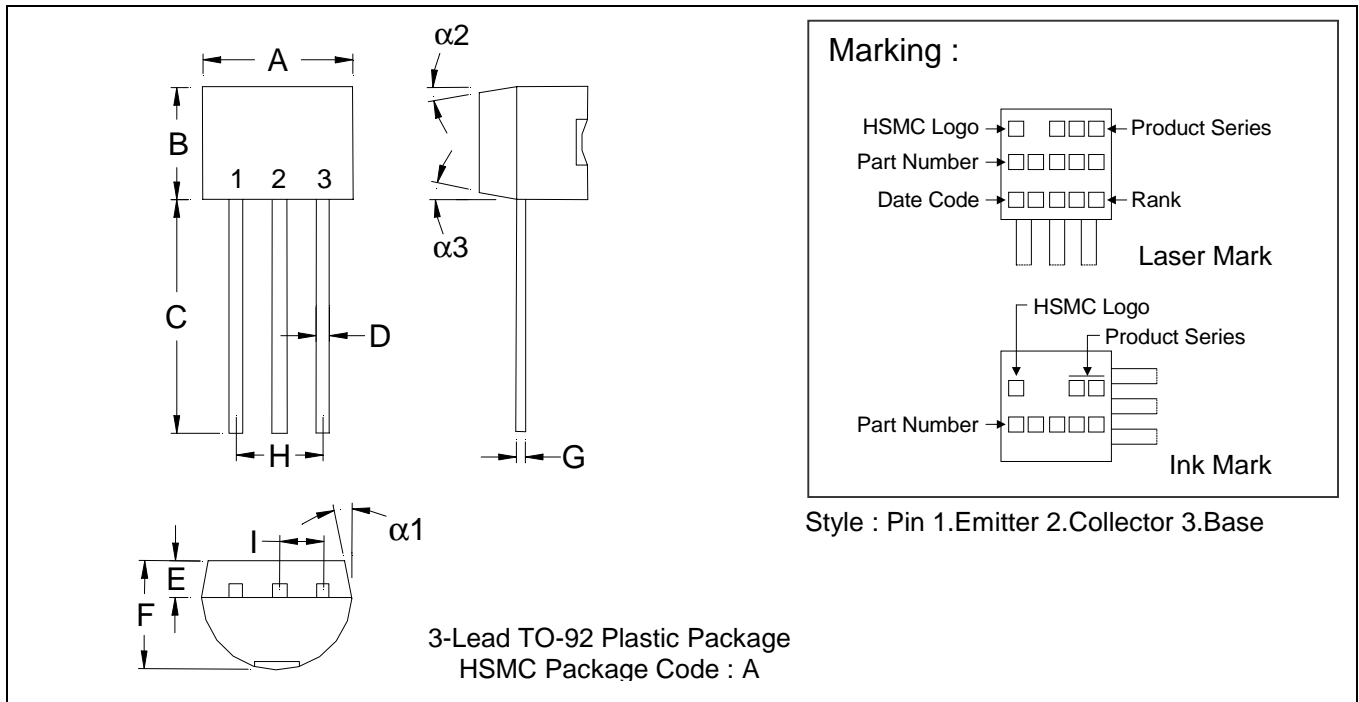


### Characteristics Curve





## 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