

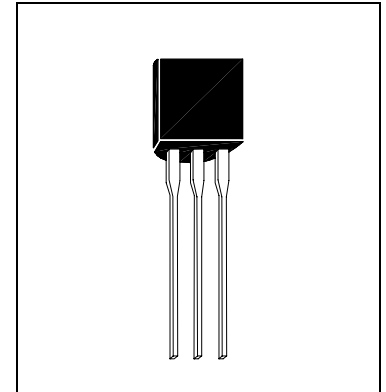


# HSD667A

SILICON NPN EPITAXIAL

## Description

Low Frequency Power Amplifier Complementary Pair With HSB647A.



## Absolute Maximum Ratings

- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... 150 °C Maximum
- Maximum Power Dissipation
  - Total Power Dissipation (Ta=25°C) ..... 900 mW
- Maximum Voltages and Currents (Ta=25°C)
  - VCBO Collector to Base Voltage ..... 120 V
  - VCEO Collector to Emitter Voltage ..... 100 V
  - VEBO Emitter to Base Voltage ..... 5 V
  - IC Collector Current (DC)..... 1 A
  - IC Collector Current (Pulse)..... 2 A

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	120	-	-	V	IC=10uA, IE=0
BVCEO	100	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	10	uA	VCB=100V, IE=0
*VCE(sat)	-	-	1	V	IC=500mA, IB=50mA
VBE(on)	-	-	1.5	V	VCE=5V, IC=150mA
*hFE1	60	-	200		VCE=5V, IC=150mA
*hFE2	30	-	-		VCE=5V, IC=500mA
fT	-	140	-	MHz	VCE=5V, IC=150mA
Cob	-	12	-	pF	VCB=10V, f=1MHz, IE=0

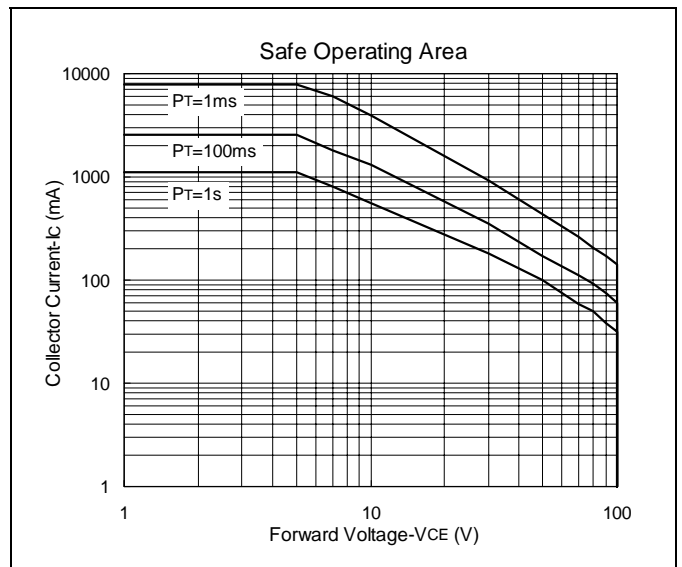
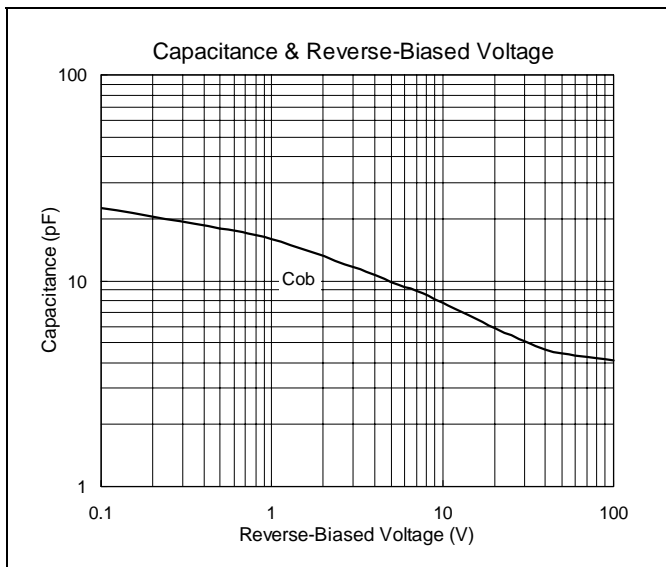
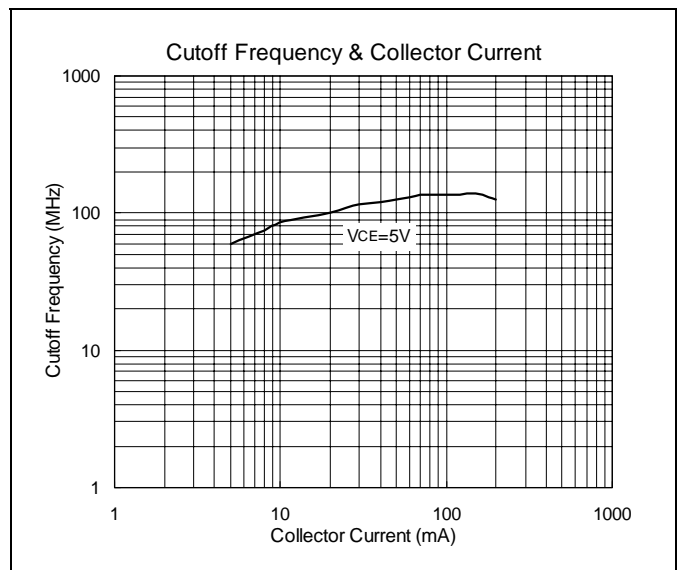
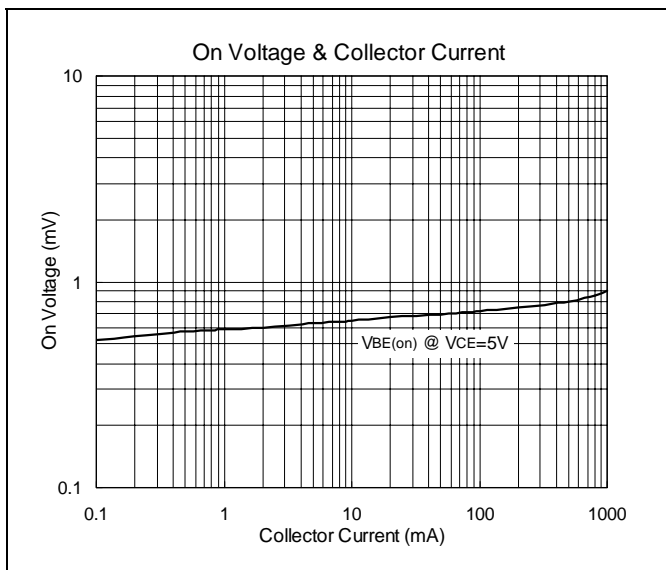
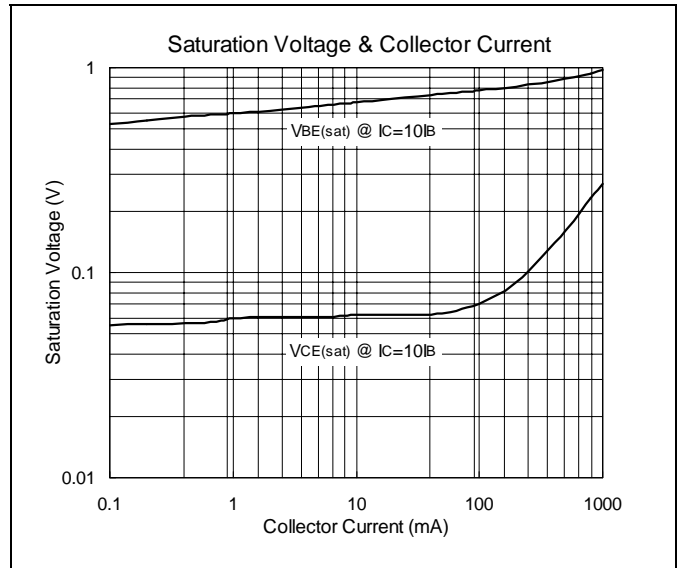
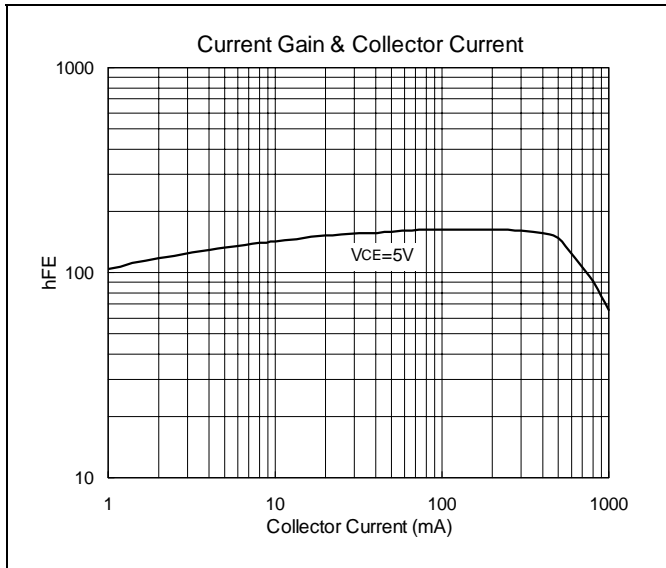
\*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

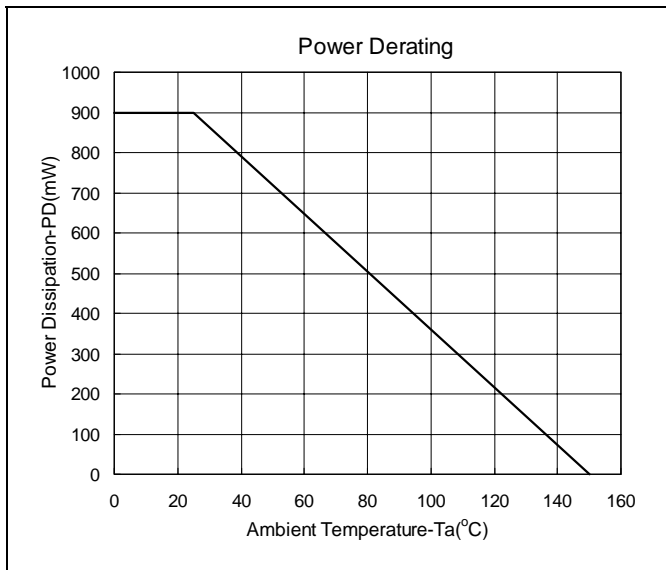
## Classification of hFE

Rank	B	C
Range	60-120	100-200



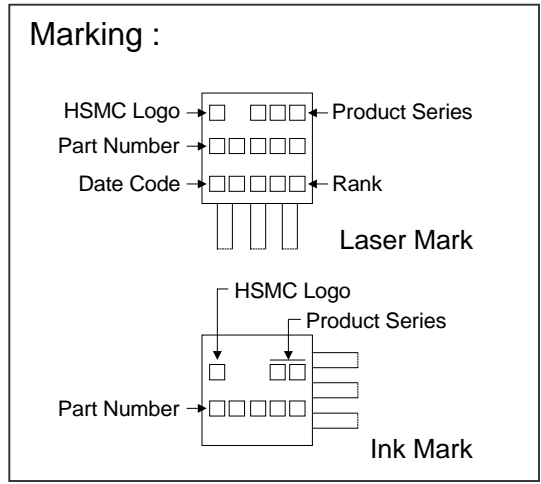
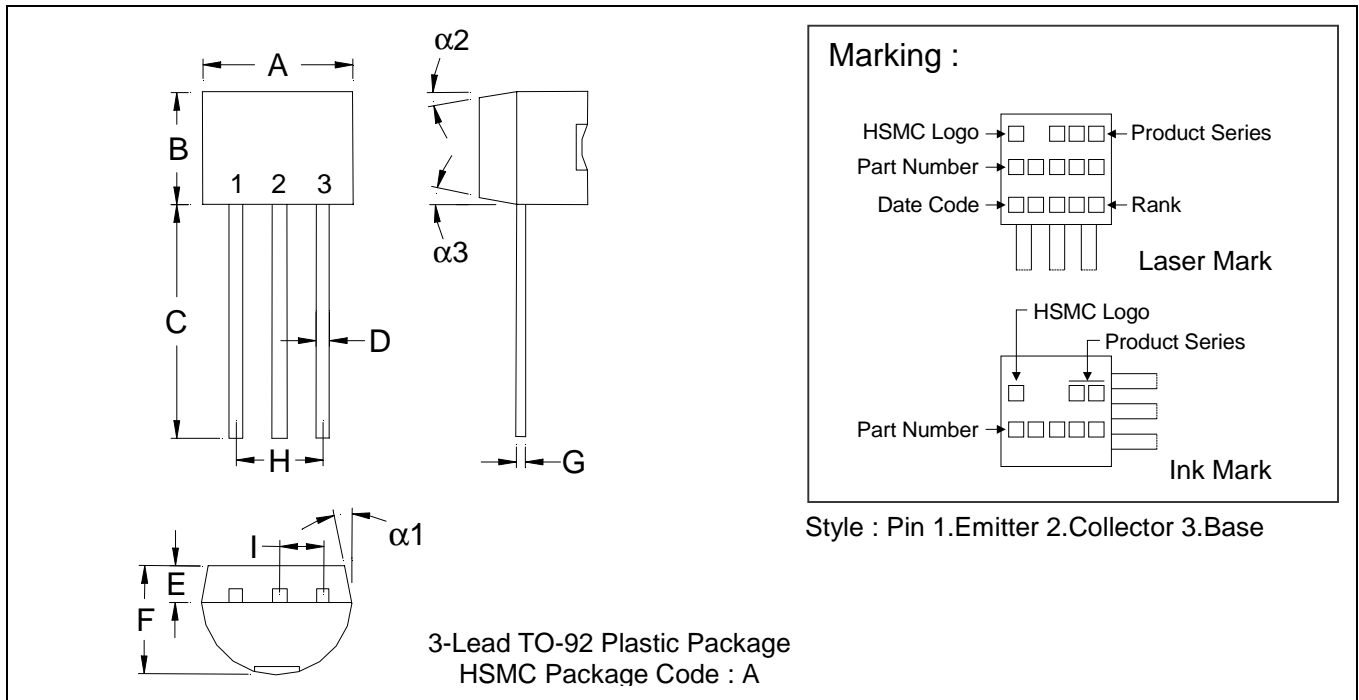
### Characteristics Curve







### TO-92 Dimension



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

\*: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

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