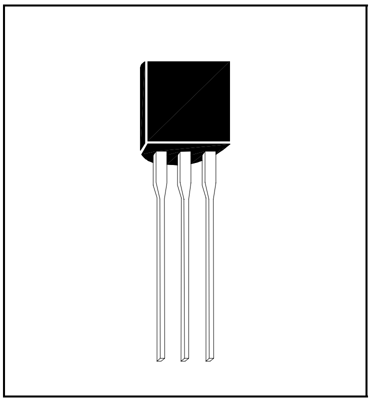
HSD667A

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)

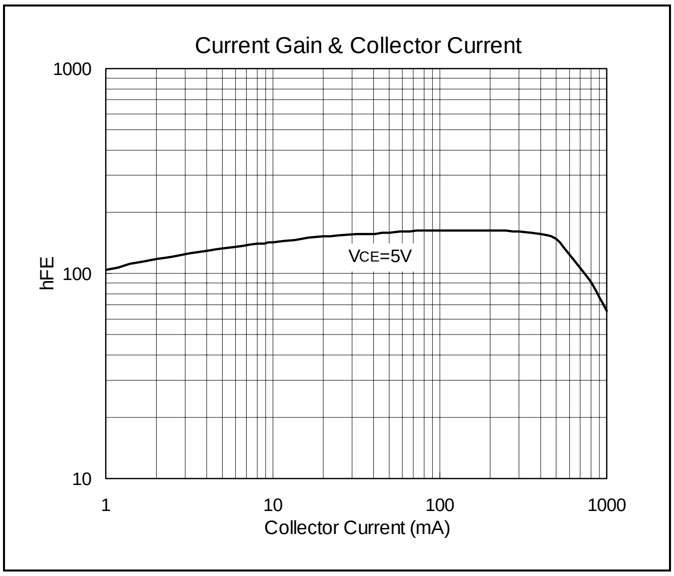
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	120	-	-	V	IC=10uA, IE=0
BVCEO	100	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	10	uA	VCB=100V, IE=0
*VCE(sat)	-	-	1	V	IC=500mA, IB=50mA
VBE(on)	-	-	1.5	V	VCE=5V, IC=150mA
*hFE1	60	-	200		VCE=5V, IC=150mA
*hFE2	30	-	-		VCE=5V, IC=500mA
fT	-	140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

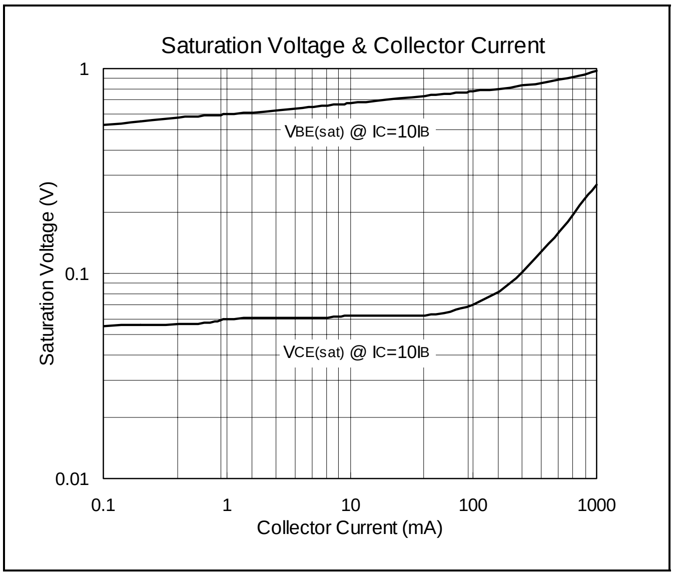
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

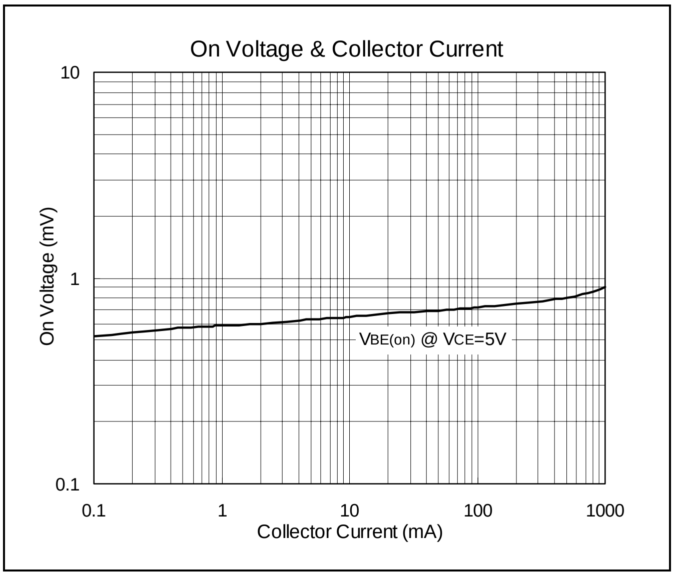
Classification of hFE

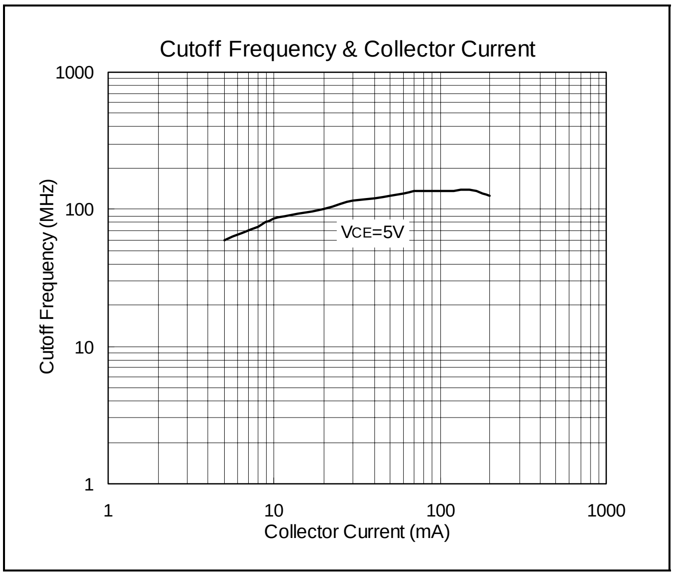
Rank	B	C
Range	60-120	100-200

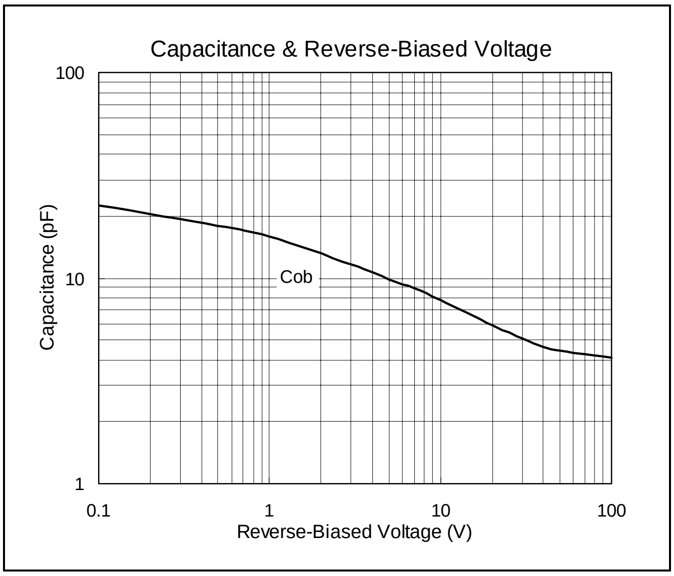
Characteristics Curve

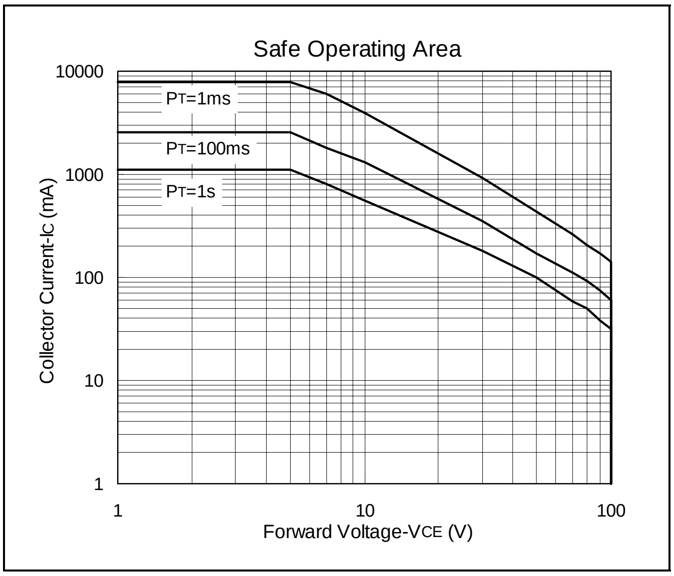

Current Gain & Collector Current

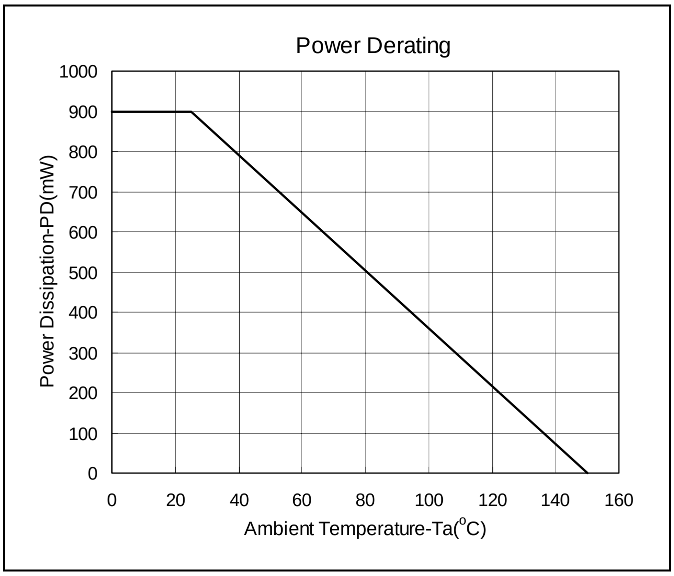

Saturation Voltage & Collector Current


On Voltage & Collector Current

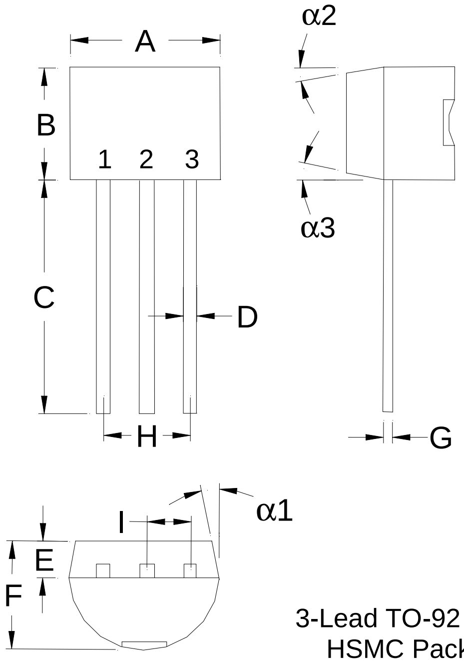

Cutoff Frequency & Collector Current


Capacitance & Reverse-Biased Voltage

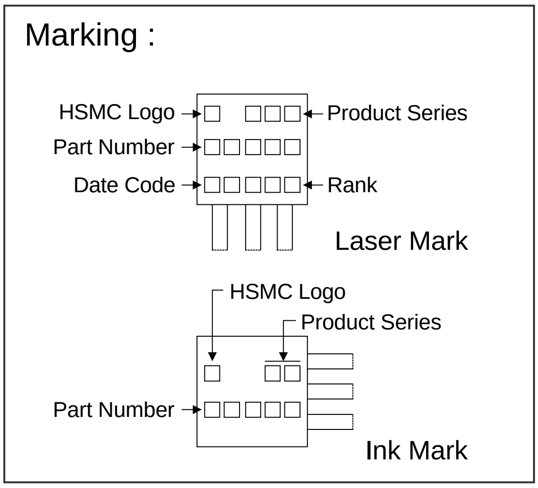

Safe Operating Area


Power Derating
Power Dissipation-PD(mW)
1000
900
800
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
Ambient Temperature-Ta(°C)

TO-92 Dimension



3-Lead TO-92 Plastic Package
HSMC Package Code : A



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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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
- **Factory 2 :** No. 17-1, Ta-Tung Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
  Tel : 886-3-5977061 Fax : 886-3-5979220