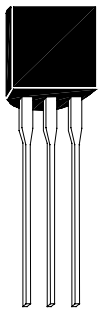
HMPSA94

PNP EPITAXIAL PLANAR TRANSISTOR



TO-92

Description

The HMPSA94 is designed for application that requires high voltage.

Features

- High Breakdown Voltage: 400V(Min.) at IC=1mA
- High Current: IC=300mA at 25°C
- Complementary to HMPSA44

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..... -400 V
  VCEO Collector to Emitter Voltage ..... -400 V
  VEBO Emitter to Base Voltage..... -6 V
  IC Collector Current ..... -500 mA

Characteristics (Ta=25°C)

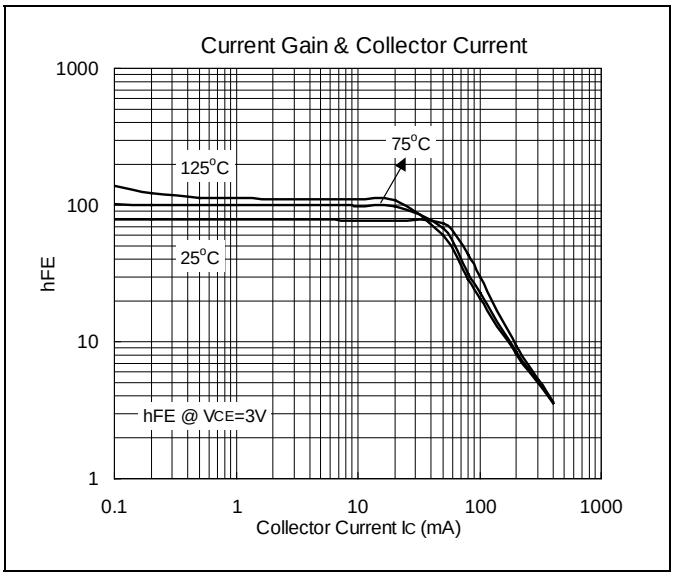
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-400	-	-	V	IC=-100uA, IE=0
BVCEO	-400	-	-	V	IC=-1mA, IB=0
BVEBO	-6	-	-	V	IE=-10uA, IC=0
ICBO	-	-	-100	nA	VCB=-400V, IE=0
IEBO	-	-	-100	nA	VEB=-4V, IC=0
ICES	-	-	-500	nA	VCE=-400V, VBE=0
*VCE(sat)1	-	-	-350	mV	IC=-1mA, IB=-0.1mA
*VCE(sat)2	-	-	-500	mV	IC=-20mA, IB=-2mA
*VCE(sat)3	-	-	-750	mV	IC=-50mA, IB=-5mA
*VBE(sat)	-	-	-750	mV	IC=-10mA, IB=-1mA
*hFE1	40	-	-		VCE=-10V, IC=-1mA
*hFE2	50	-	300		VCE=-10V, IC=-10mA
*hFE3	45	-	-		VCE=-10V, IC=-50mA
*hFE4	40	-	-		VCE=-10V, IC=-100mA

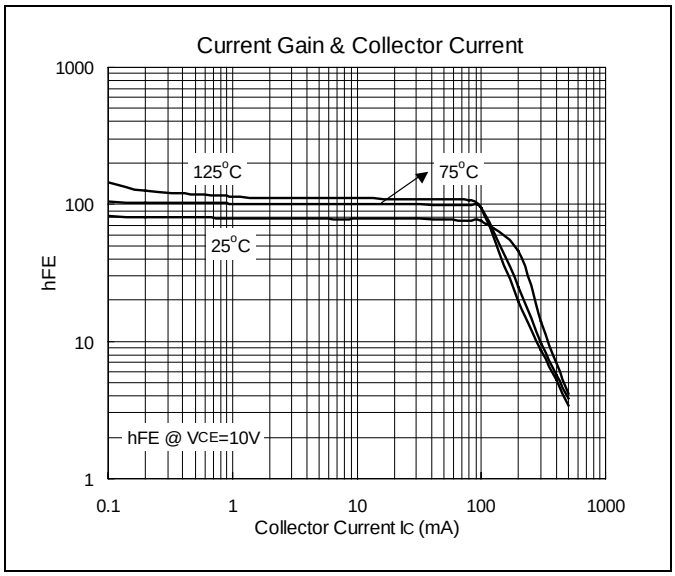
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

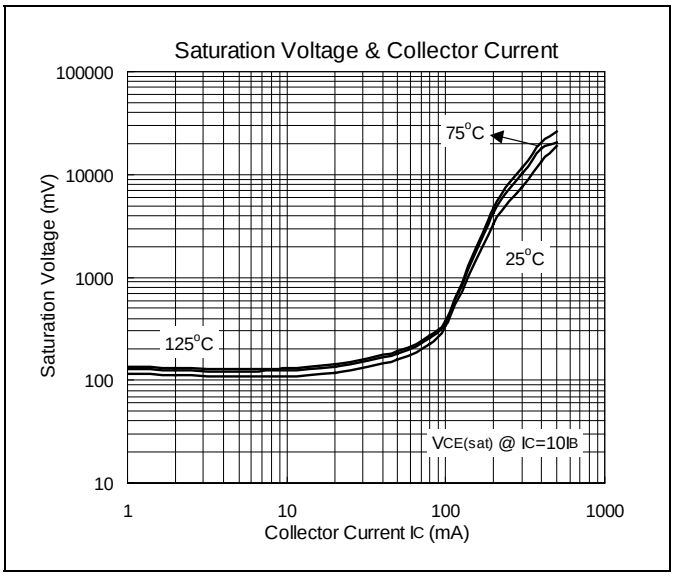
Classification Of hFE2

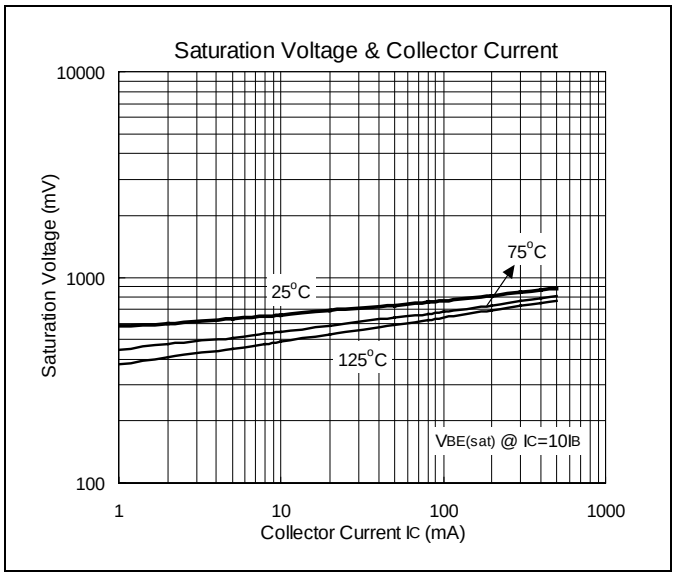
Rank	NSS	NS	SD	N
hFE@VCE=-3V, IC=-100mA	>50	>50	-	-
hFE2@VCE=-10V, IC=-10mA	70-200	70-300	70-200	50-300
VCE(sat)@IC=-20mA, IB=-2mA	<200mV	<500mV	<200mV	<500mV

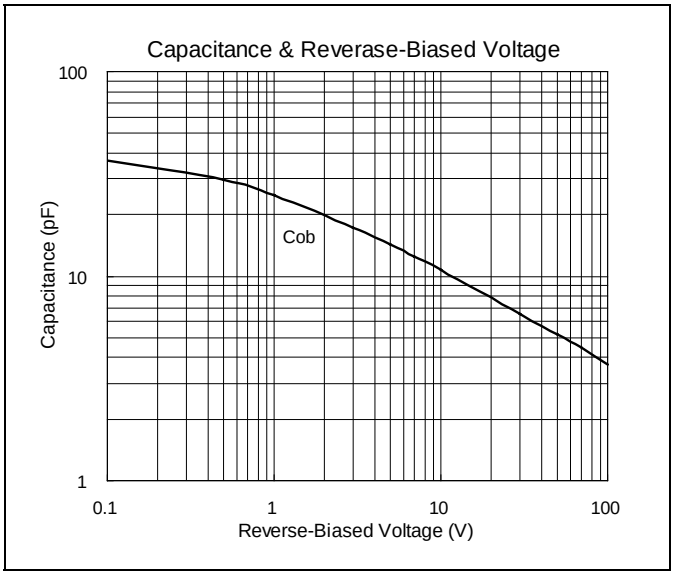
Characteristics Curve

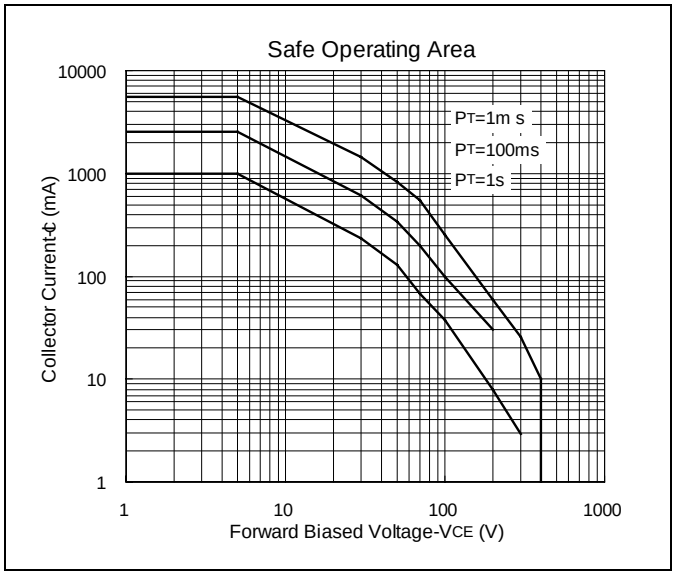


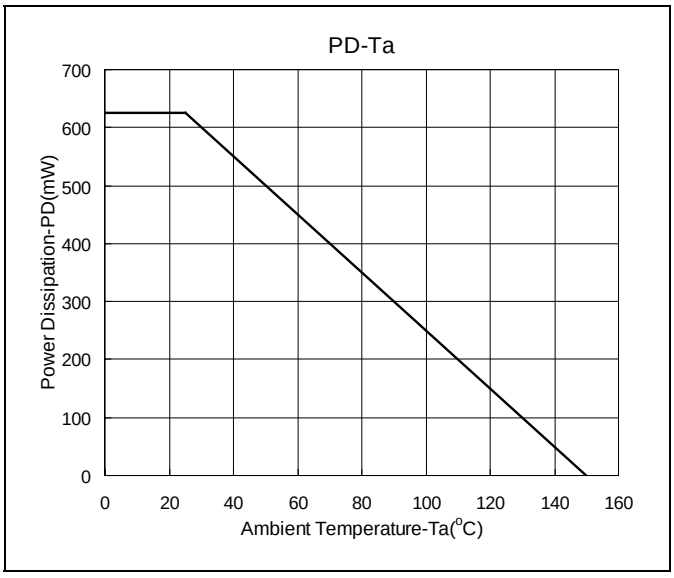




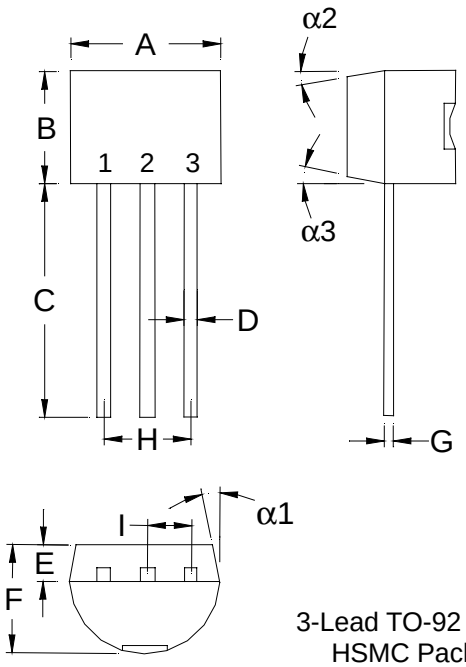




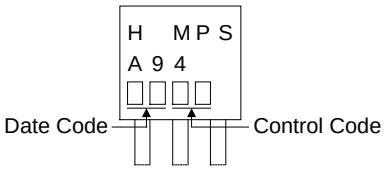



PD-Ta
Power Dissipation-PD(mW)
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
Ambient Temperature-Ta(°C)

TO-92 Dimension



Marking:



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

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

*: 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

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

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.