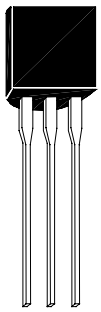
HMPSA44

NPN EPITAXIAL PLANAR TRANSISTOR



TO-92

Description

The HMPSA44 is designed for application that requires high voltage.

Features

- High Breakdown Voltage: 400(Min) at IC=1mA
- High Current Gain: IC=300mA at 25°C
- Complementary to HMPSA94

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
  VCBO Emitter to Base Voltage ..... 6 V
  IC Collector Current 300mA

Characteristics (Ta=25°C)

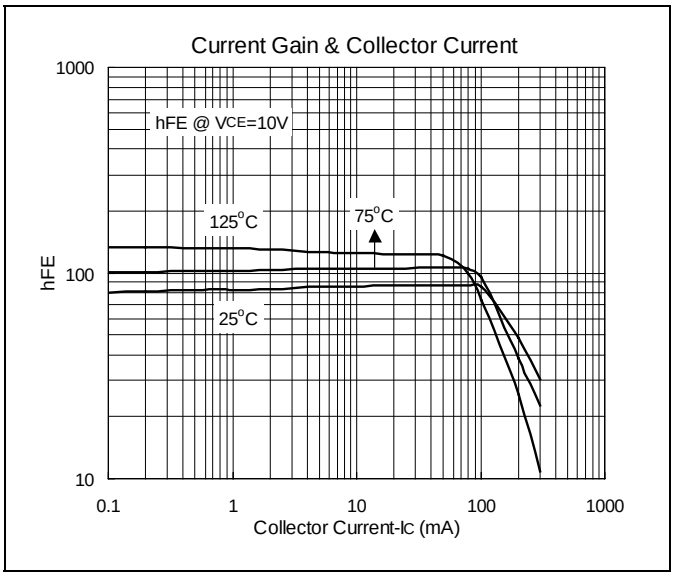
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	400	-	-	V	IC=100uA, IE=0
BVCEO	400	-	-	V	IC=1mA, IB=0
BVEBO	6	-	-	V	IE=10uA, IC=0
ICBO	-	-	100	nA	VCB=400V, IE=0
IEBO	-	-	100	nA	VEB=4V, IC=0
ICES	-	-	500	nA	VCE=400V, VBE=0
*VCE(sat)1	-	-	350	mV	IC=1mA, IB=0.1mA
*VCE(sat)2	-	-	350	mV	IC=20mA, IB=2mA
*VCE(sat)3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

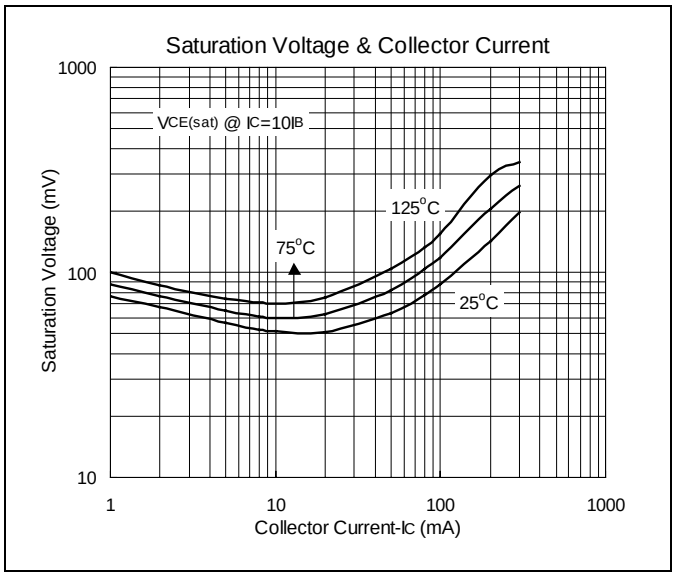
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

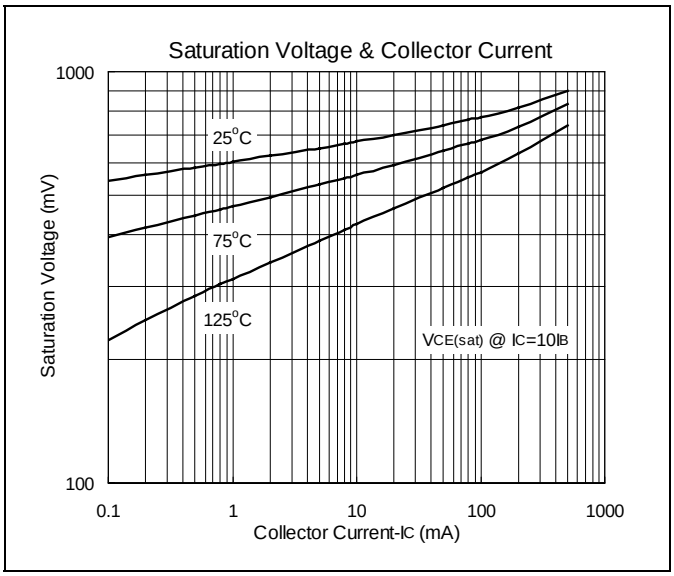
Classification Of hFE2

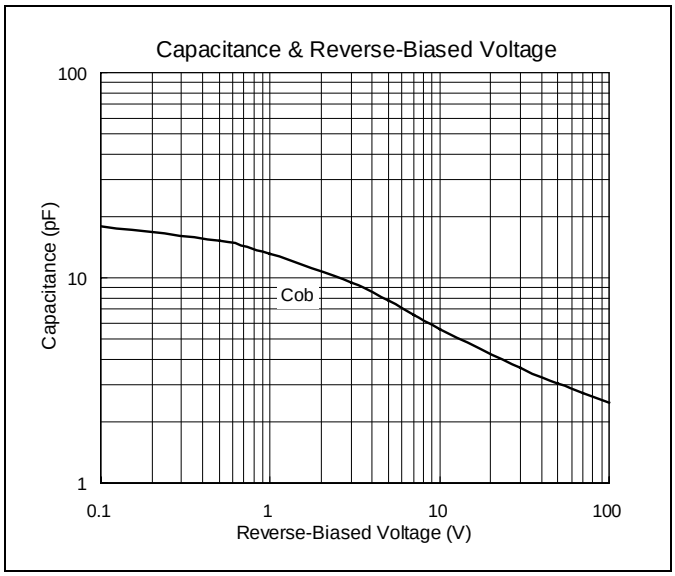
Rank	N	SD	SUM
Range	50-300	70-210	120-300

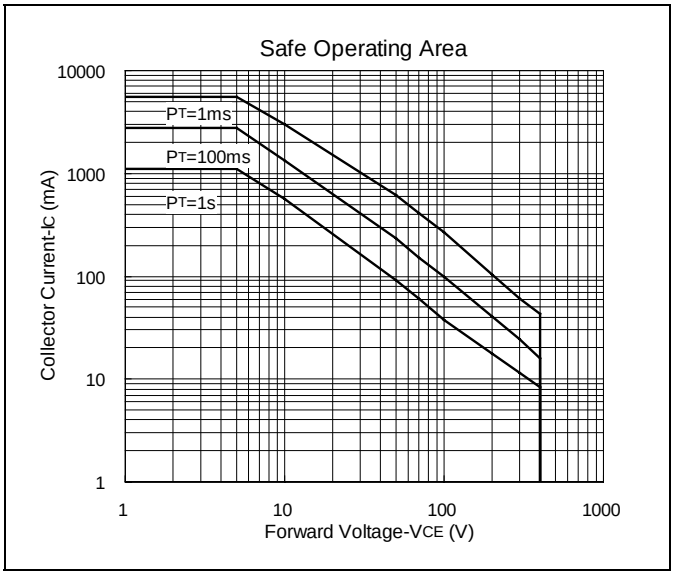
Characteristics Curve

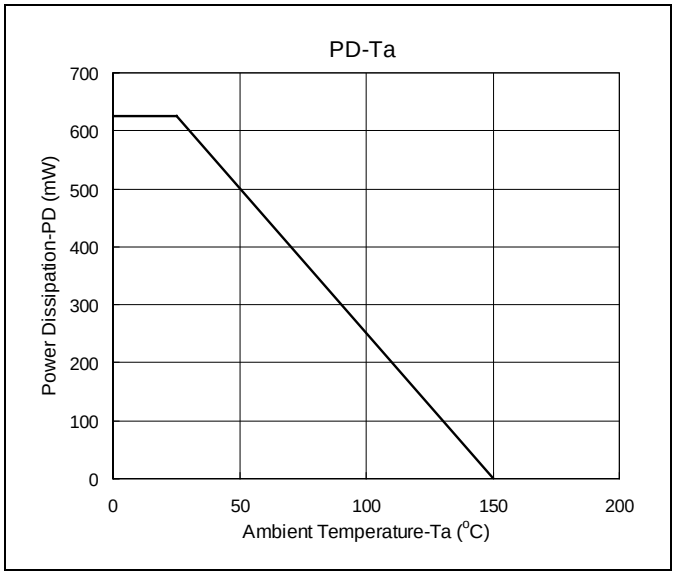




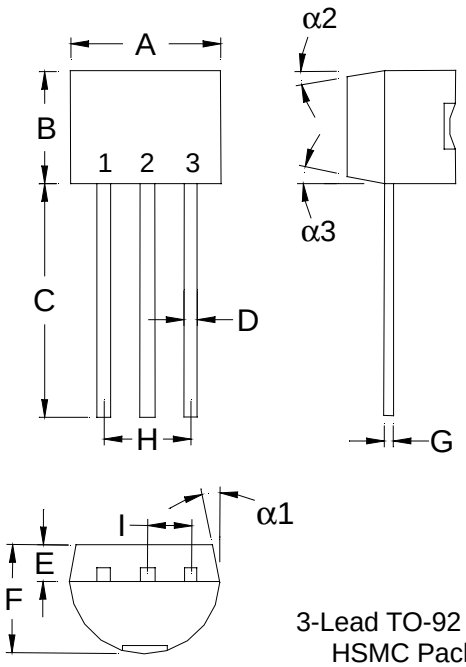




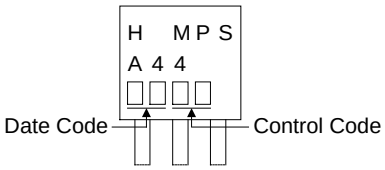




TO-92 Dimension



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.