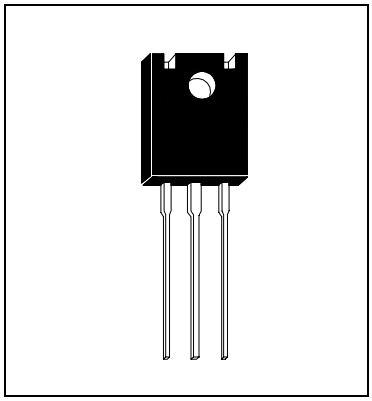
HMPSA44V

NPN EPITAXIAL PLANAR TRANSISTOR



Description

The HMPSA44V is designed for application that require high voltage.

Features

- High Voltage: VCEO=400(min) at IC=1mA
- High Current: IC=300mV at 25°C
- Complementary to HMPSA94V

Absolute Maximum Ratings (Ta=25°C)

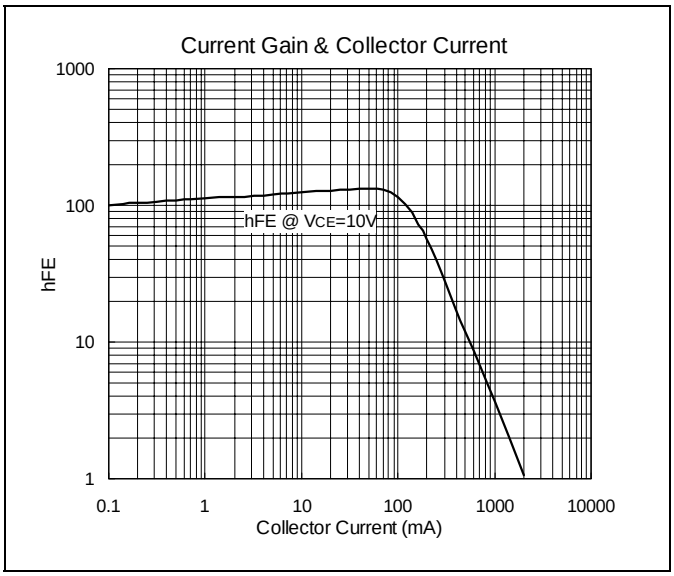
- Maximum Temperatures
  Storage Temperature ..... -55 ~ +150 °C
  Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) ..... 1.3 W
- Maximum Voltages and Currents
  BVCBO Collector to Base Voltage ..... 400 V
  BVCEO Collector to Emitter Voltage ..... 400 V
  BVEBO Emitter to Base Voltage ..... 6 V
  IC Collector Current ..... 300 mA

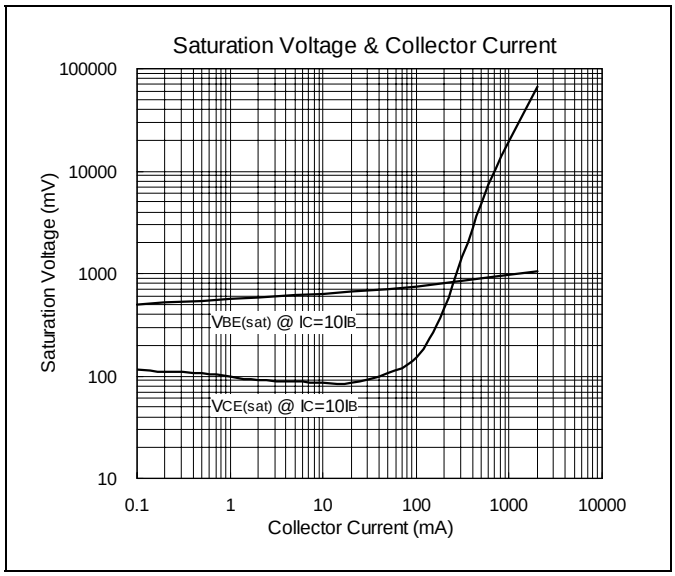
Electrical Characteristics (Ta=25°C)

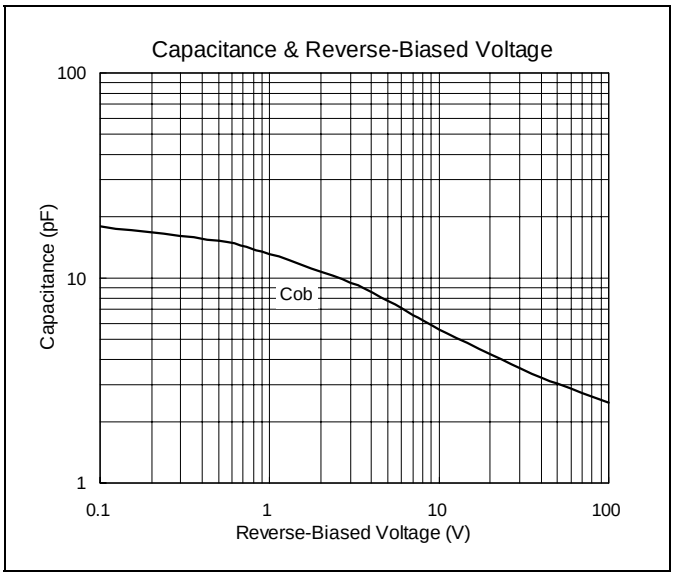
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	400	-	-	V	IC=100uA
BVCEO	400	-	-	V	IC=1mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	100	nA	VCB=400V
IEBO	-	-	100	nA	VEB=4V
ICES	-	-	500	nA	VCE=400V
*VCE(sat)1	-	-	320	mV	IC=1mA, IB=0.1mA
*VCE(sat)2	-	-	350	mV	IC=20mA, IB=2mA
*VCE(sat)3	-	-	750	mV	IC=50mA, IB=5mA
*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
fT	50	-	-	MHz	IC=10mA, VCE=20V, f=100MHz
Cob	-	4	-	pF	VCB=20V, f=1MHz

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

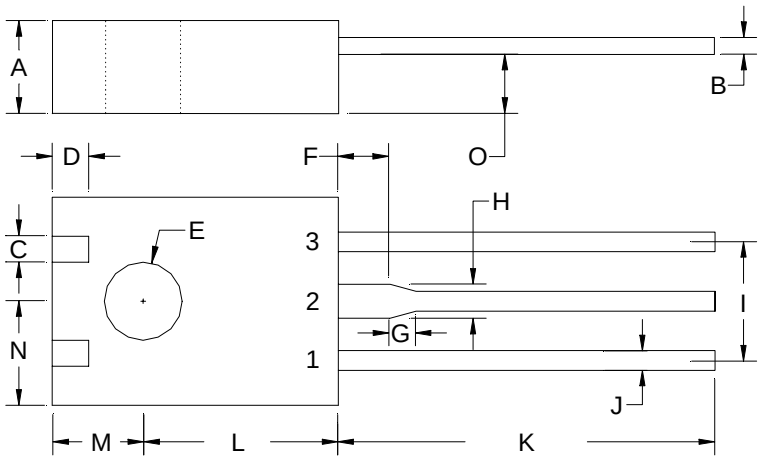
Characteristics Curve





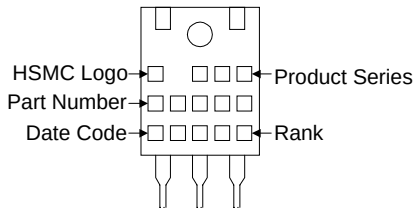


TO-126ML Dimension



3-Lead TO-126ML Plastic Package
HSMC Package Code : D

Marking :



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

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1356	0.1457	3.44	3.70	I	-	*0.1795	-	*4.56
B	0.0170	0.0272	0.43	0.69	J	0.0268	0.0331	0.68	0.84
C	0.0344	0.0444	0.87	1.12	K	0.5512	0.5906	14.00	15.00
D	0.0501	0.0601	1.27	1.52	L	0.2903	0.3003	7.37	7.62
E	0.1131	0.1231	2.87	3.12	M	0.1378	0.1478	3.50	3.75
F	0.0737	0.0837	1.87	2.12	N	0.1525	0.1625	3.87	4.12
G	0.0294	0.0494	0.74	1.25	O	0.0740	0.0842	1.88	2.14
H	0.0462	0.0562	1.17	1.42					

Notes : 1.Dimension and tolerance based on our Spec. dated Mar. 6,1995.
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
- **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