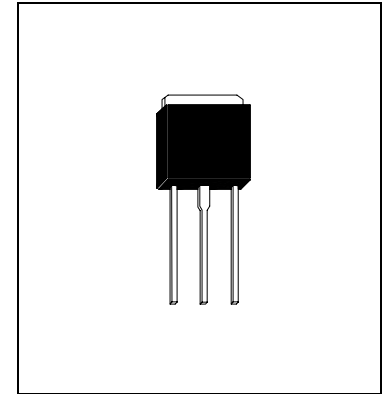




# HI44H11

NPN EPITAXIAL PLANAR TRANSISTOR



## Description

The HI44H11 is designed for various specific and general purpose applications, such as: output and driver stages of amplifiers operating at frequencies from DC to greater than 1MHz; series, shunt and switching regulators; low and high frequency inverters/converters; and many others.

## Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... +150 °C
- Maximum Power Dissipation
  - Total Power Dissipation (Tc=25°C) ..... 20 W
- Maximum Voltages and Currents
  - BVCEO Collector to Base Voltage ..... 80 V
  - BVCES Collector to Emitter Voltage ..... 80 V
  - BVEBO Emitter to Base Voltage ..... 5 V
  - IC Collector Current ..... 10 A
  - IB Base Current ..... 5 A

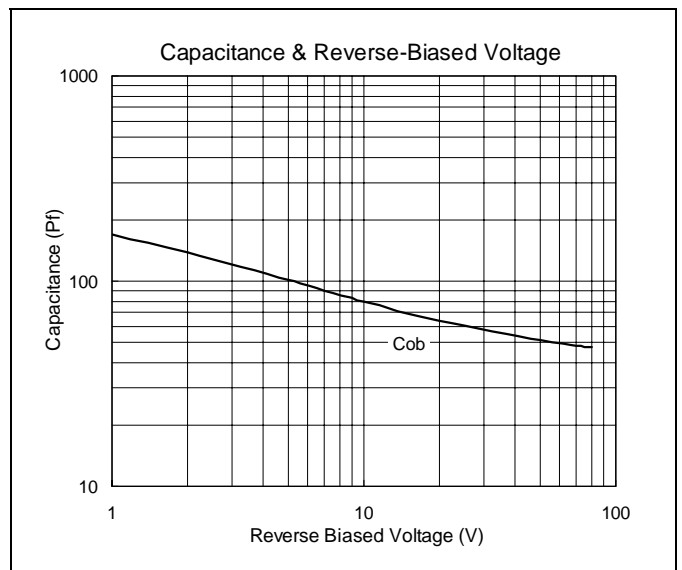
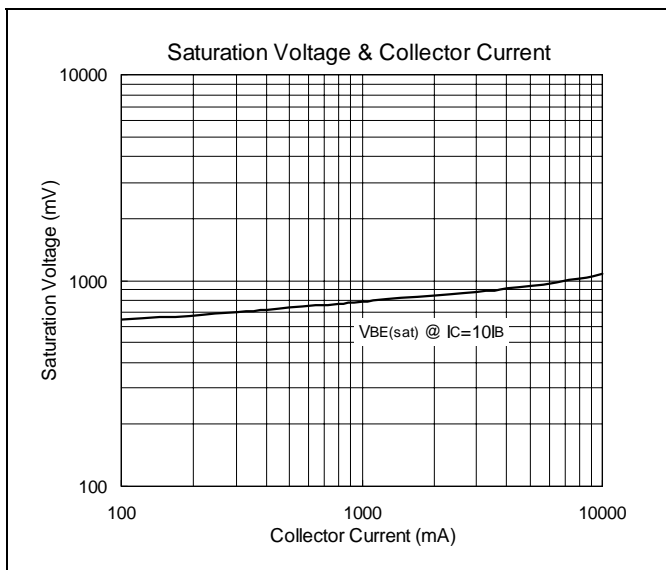
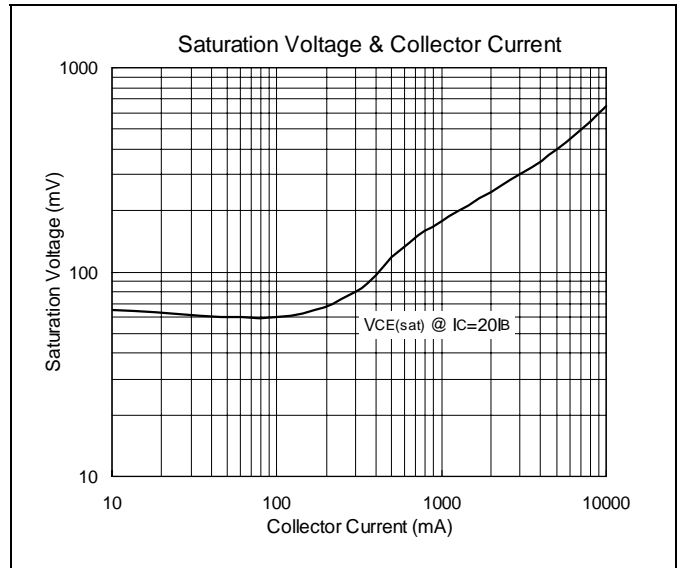
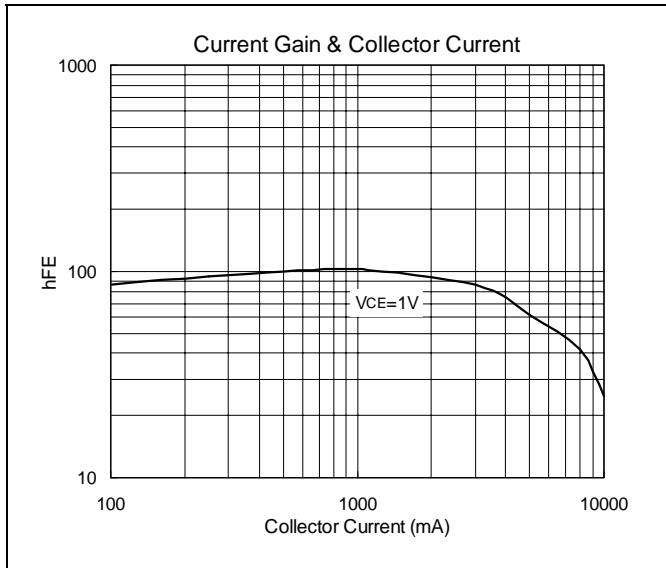
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCEO	80	-	-	V	IC=30mA, IB=0
BVCES	80	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=1mA, IC=0
ICBO	-	-	10	uA	VCB=80V, VEB=0
IEBO	-	-	50	uA	VEB=5V, IC=0
*VCE(sat)	-	-	1	V	IC=8A, IB=0.4A
*VBE(sat)	-	-	1.5	V	IC=8A, IB=0.8A
*hFE1	60	-	-		VCE=1V, IC=2A
*hFE2	40	-	-		VCE=1V, IC=4A
Cob	-	130	-	pF	VCB=10V, f=1MHz
fT	-	50	-	MHz	VCE=10V, IC=500mA, f=20MHz

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

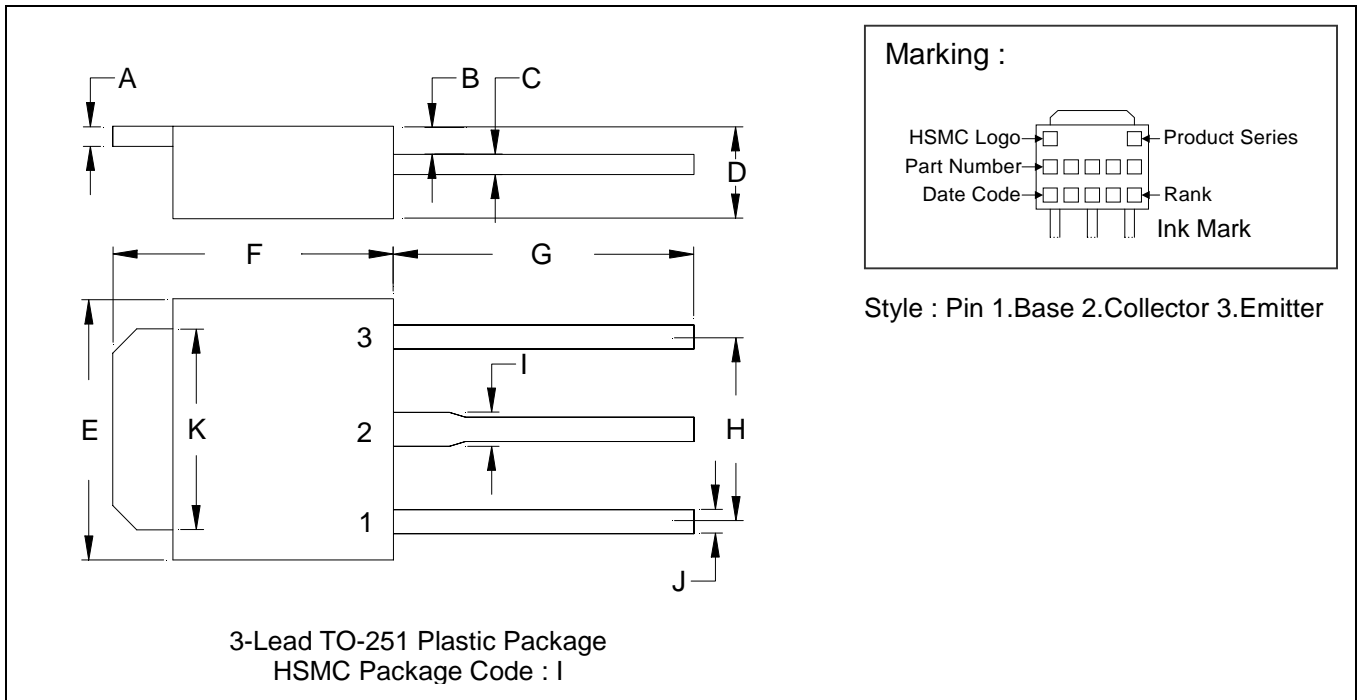


### Characteristics Curve

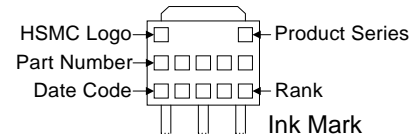




## TO-251 Dimension



### Marking :



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

\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0177	0.0217	0.45	0.55	G	0.2559	-	6.50	-
B	0.0354	0.0591	0.90	1.50	H	-	*0.1811	-	*4.60
C	0.0177	0.0236	0.45	0.60	I	-	0.0354	-	0.90
D	0.0866	0.0945	2.20	2.40	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2677	0.2835	6.80	7.20					

Notes : 1.Dimension and tolerance based on our Spec. dated May. 24,1995.  
 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

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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