

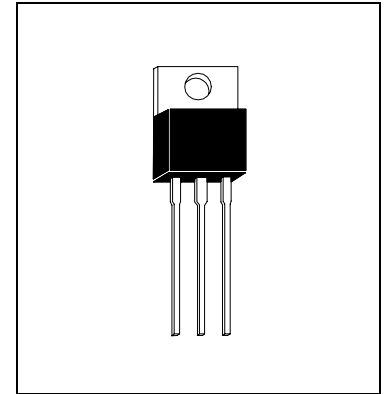


# HD45H11

PNP EPITAXIAL PLANAR TRANSISTOR

## Description

The HD45H11 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
- Maximum Power Dissipation
  - Total Power Dissipation (Tc=25°C) ..... 50 W
- Maximum Voltages and Currents
  - BVCBO Collector to Base Voltage ..... -80 V
  - BVCEO Collector to Emitter Voltage ..... -80 V
  - BVEBO Emitter to Base Voltage ..... -5 V
  - IC Collector Current ..... -10 A
  - IB Base Current ..... -5 A

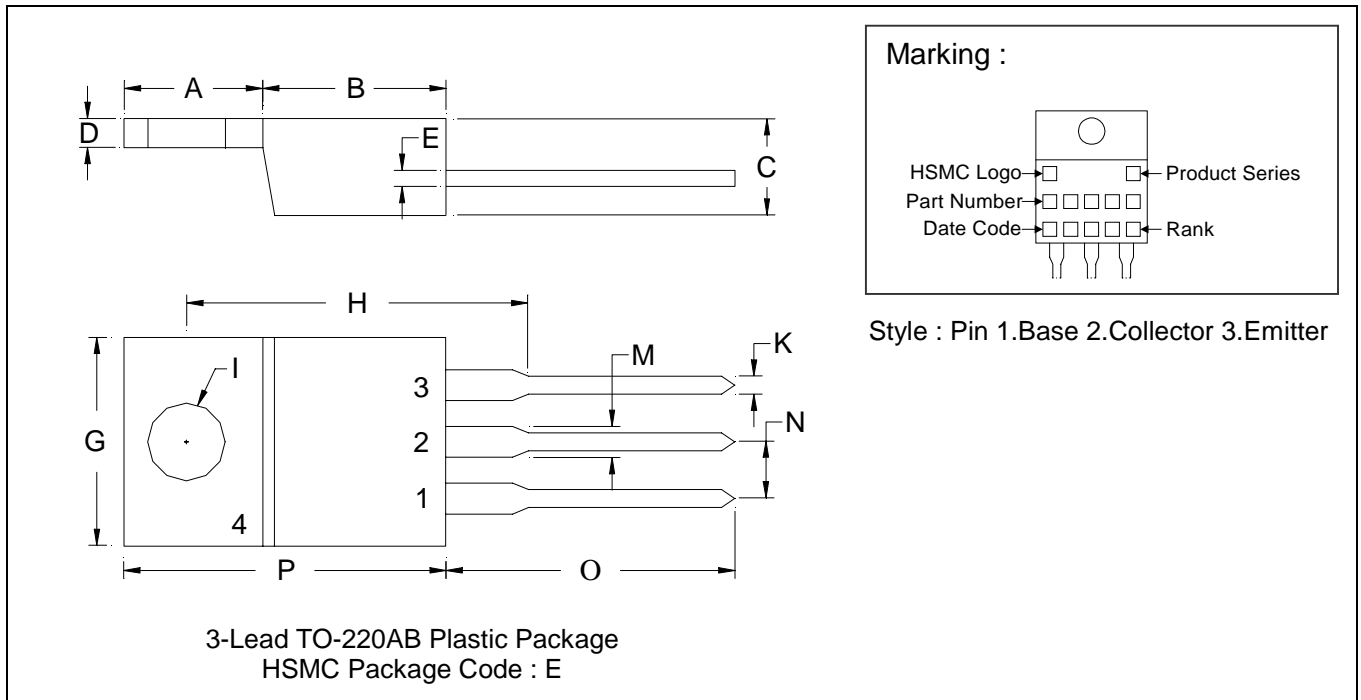
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-80	-	-	V	IC=-100mA
BVCEO	-80	-	-	V	IC=-100mA
BVCES	-80	-	-	V	IC=-1mA
BVEBO	-5	-	-	V	IE=-1mA
ICBO	-	-	-10	uA	VCB=-80V
IEBO	-	-	-100	uA	VEB=-5V
*VCE(sat)	-	-	-1	V	IC=-8A, IB=-0.8A
*VBE(sat)	-	-	-1.5	V	IC=-8A, IB=-0.8A
*hFE1	100	-	-		IC=-250mA, VCE=-1V
*hFE2	60	-	-		IC=-2A, VCE=-1V
*hFE3	40	-	-		IC=-4A, VCE=-1V
Cob	-	230	-	pF	VCB=-10V
fT	-	40	-	MHz	VCE=-1V, IC=-500mA, f=100MHz

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



### TO-220AB Dimension



\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.2197	0.2949	5.58	7.49	I	-	*0.1508	-	*3.83
B	0.3299	0.3504	8.38	8.90	K	0.0295	0.0374	0.75	0.95
C	0.1732	0.185	4.40	4.70	M	0.0449	0.0551	1.14	1.40
D	0.0453	0.0547	1.15	1.39	N	-	*0.1000	-	*2.54
E	0.0138	0.0236	0.35	0.60	O	0.5000	0.5618	12.70	14.27
G	0.3803	0.4047	9.66	10.28	P	0.5701	0.6248	14.48	15.87
H	-	*0.6398	-	*16.25					

Notes : 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.  
 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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