

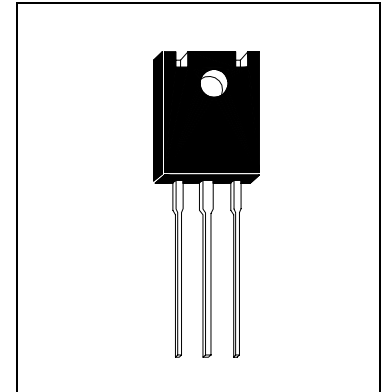


HBD238

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HBD238 is designed for medium power linear and switching applications.



Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
 - Storage Temperature -50 ~ +150 °C
 - Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Tc=25°C) 25 W
- Maximum Voltages and Currents
 - BVCBO Collector to Base Voltage -100 V
 - BVCEO Collector to Emitter Voltage -80 V
 - BVEBO Emitter to Base Voltage -5 V
 - BVCER Emitter to Base Voltage -100 V
 - IC Collector Current -2 A
 - IC Collector Current (Pulse) -6 A

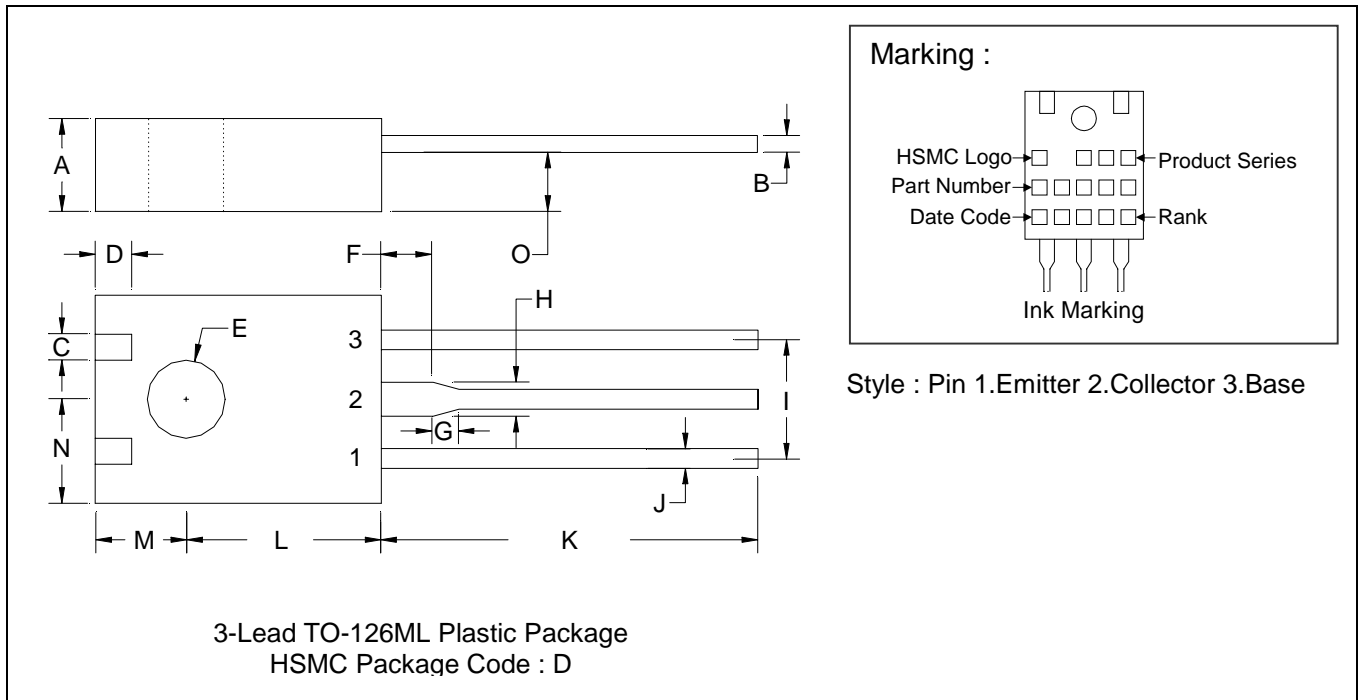
Electrical Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-100	-	-	V	IC=-1mA
*BVCEO	-80	-	-	V	IC=-100mA
BVEBO	-5	-	-	V	IE=-100uA
ICBO	-	-	-100	uA	VCB=-100V
IEBO	-	-	-1	mA	VBE=-5V
*VCE(sat)	-	-	-0.6	V	IC=-1A, IB=-0.1A
*VBE(on)	-	-	-1.3	V	IC=-1A, VCE=-2V
*hFE1	40	-	-		IC=-150mA, VCE=-2V
*hFE2	25	-	-		IC=-1A, VCE=-2V
fT	3	-	-	MHz	VCE=-10V, IC=-250mA, f=100MHz

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



TO-126ML Dimension



*: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

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- **HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

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