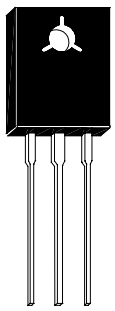
HMJE13003

NPN EPITAXIAL PLANAR TRANSISTOR



TO-126

Description

- High Voltage, High Speed Power Switch
- Switch Regulators
- PWM Inverters and Motor Controls
- Solenoid and Relay Drivers
- Deflection Circuits

Absolute Maximum Ratings (Ta=25°C)

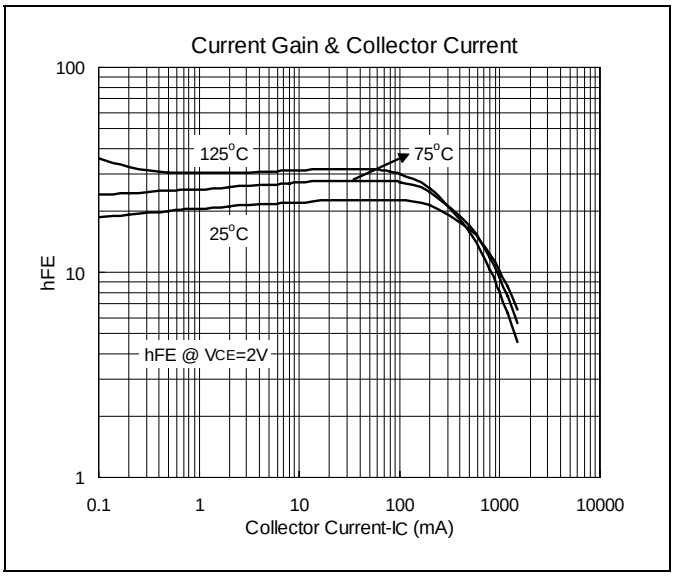
- Maximum Temperatures
  Storage Temperature ..... -50 ~ +150 °C
  Junction Temperature ..... 150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Tc=25°C) ..... 40 W
- Maximum Voltages and Currents (Ta=25°C)
  VCEX Collector to Emitter Voltage ..... 700 V
  VCEO Collector to Emitter Voltage ..... 400 V
  VEBO Emitter to Base Voltage ..... 9 V
  IC Collector Current ..... Continuous 1.5 A
  IB Base Current ..... Continuous 0.75 A

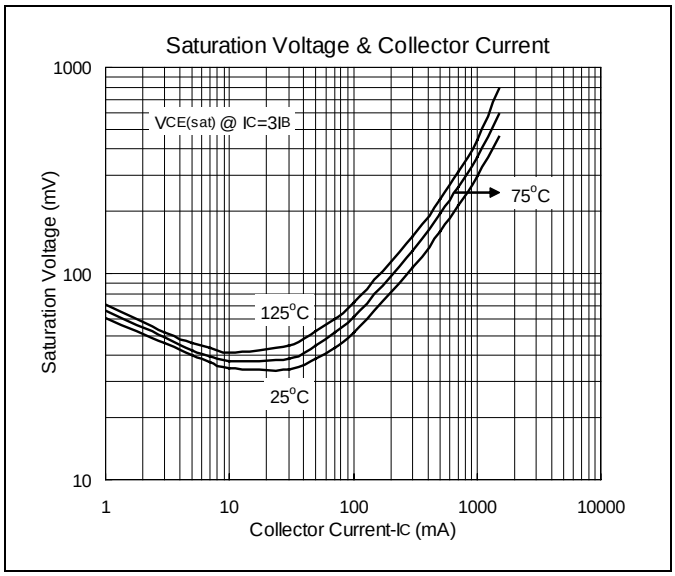
Characteristics (Ta=25°C)

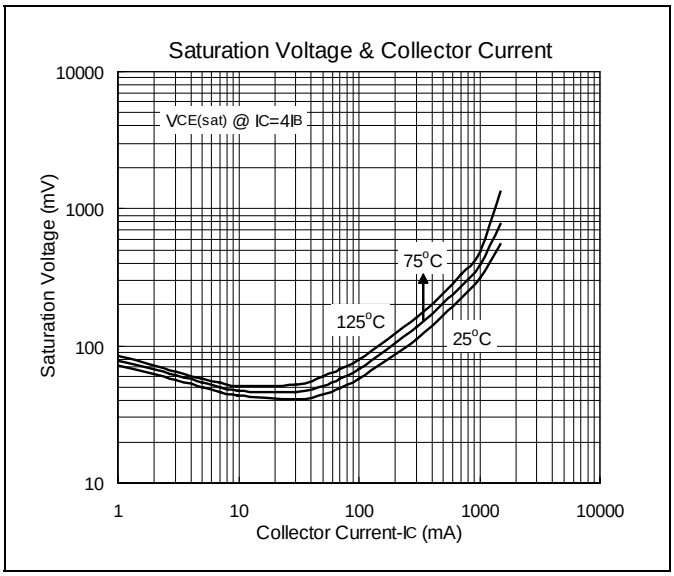
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCEX	700	-	-	V	IC=1mA, VBE(off)=1.5V
BVCEO	400	-	-	V	IC=10mA
IEBO	-	-	1	mA	VEB=9V
ICEX	-	-	1	mA	VCE=700V, VBE(off)=1.5V
*VCE(sat)1	-	-	500	mV	IC=0.5A, IB=0.1A
*VCE(sat)2	-	-	1	V	IC=1A, IB=0.25A
*VCE(sat)3	-	-	3	V	IC=1.5A, IB=0.5A
*VBE(sat)	-	-	1	V	IC=0.5A, IB=0.1A
*VBE(sat)	-	-	1.2	V	IC=1A, IB=0.25A
*hFE1	8	-	40		IC=0.5A, VCE=2V
*hFE2	5	-	25		IC=1A, VCE=2V

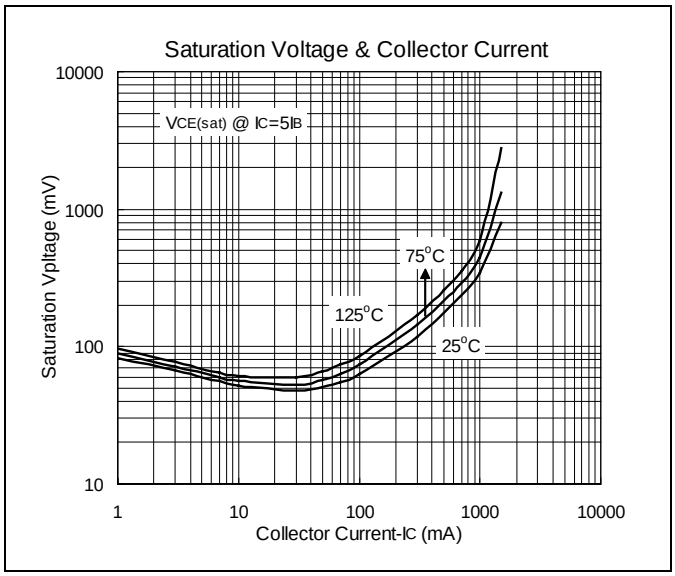
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

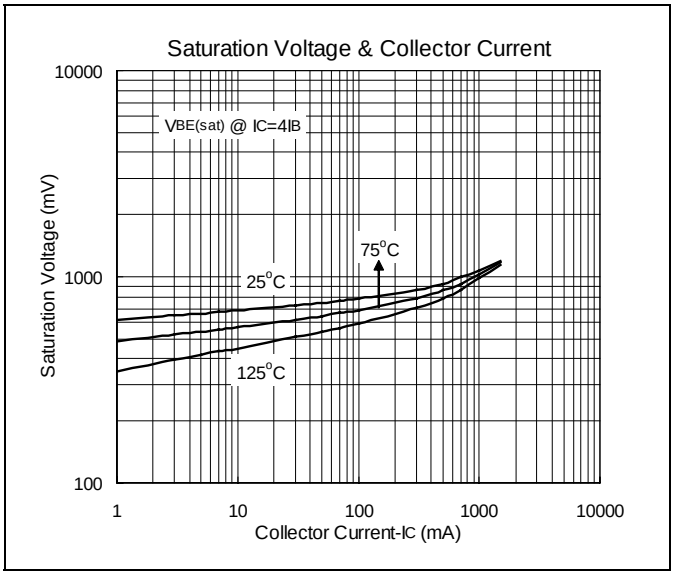
Characteristics Curve

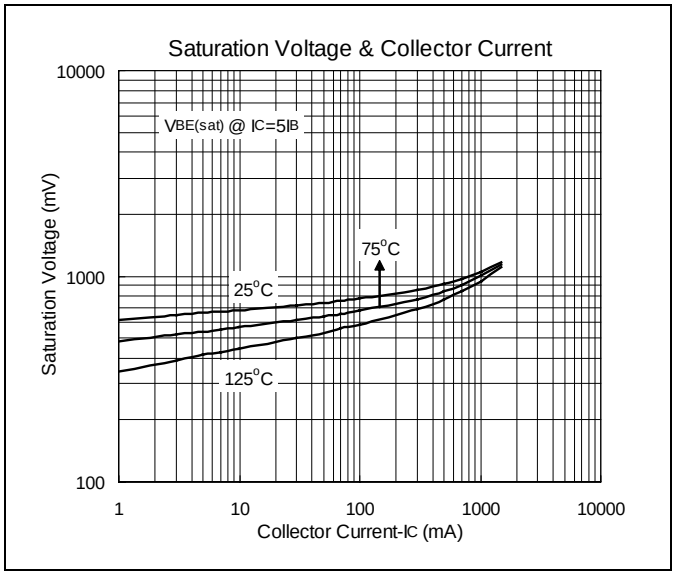




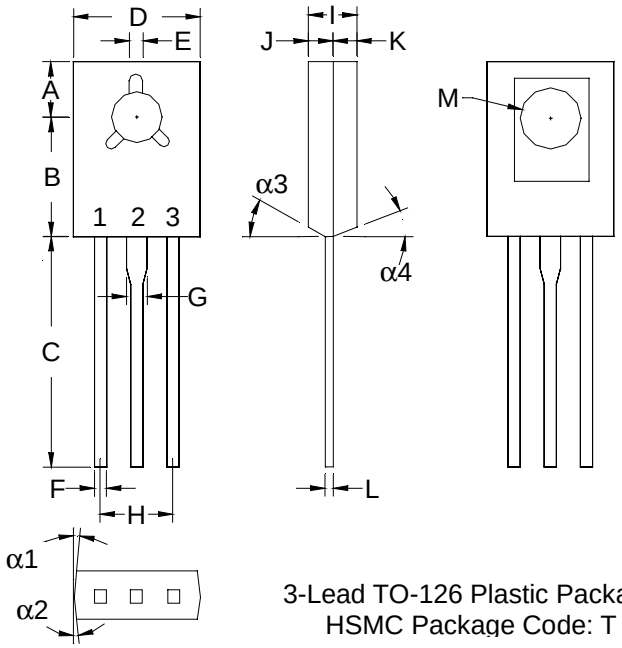






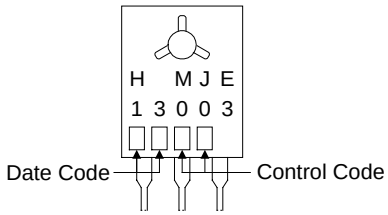


TO-126 Dimension



3-Lead TO-126 Plastic Package
HSMC Package Code: T

Marking:



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

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
α1	-	*3°	-	*3°	F	0.0280	0.0319	0.71	0.81
α2	-	*3°	-	*3°	G	0.0480	0.0520	1.22	1.32
α3	-	*3°	-	*3°	H	0.1709	0.1890	4.34	4.80
α4	-	*3°	-	*3°	I	0.0950	0.1050	2.41	2.66
A	0.1500	0.1539	3.81	3.91	J	0.0450	0.0550	1.14	1.39
B	0.2752	0.2791	6.99	7.09	K	0.0450	0.0550	1.14	1.39
C	0.5315	0.6102	13.50	15.50	L	-	*0.0217	-	*0.55
D	0.2854	0.3039	7.52	7.72	M	0.1378	0.1520	3.50	3.86
E	0.0374	0.0413	0.95	1.05					

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

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.