



HT666

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HT666 is designed for general purpose amplifier and high-speed, medium-power switching applications.

Features

- High Frequency Current Gain
- High Speed Switching Transistor

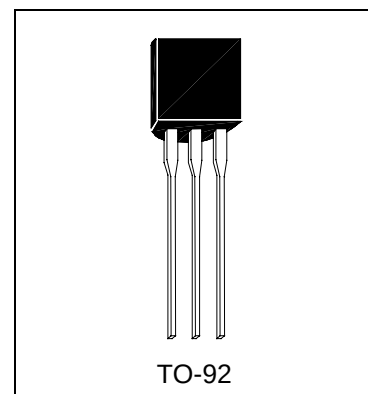
Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 625 mW
- Maximum Voltages and Currents (Ta=25°C)
BVCBO Collector to Base Voltage 75 V
BVCEO Collector to Emitter Voltage 40 V
BVEBO Emitter to Base Voltage 6 V
IC Collector Current 600 mA

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	75	-	-	V	IC=10uA
*BVCEO	40	-	-	V	IC=100mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	10	nA	VCB=60V
ICEX	-	-	10	nA	VCB=60V, VEB(off)=3V
IEBO	-	-	50	nA	VEB=3V
*VCE(sat)1	-	-	300	mV	IC=150mA, IB=15mA
*VCE(sat)2	-	-	1	V	IC=500mA, IB=50mA
*VBE(sat)1	-	-	1.2	V	IC=150mA, IB=15mA
*VBE(sat)2	-	-	2	V	IC=500mA, IB=50mA
*hFE1	35	-	-	-	VCE=10V, IC=100uA
*hFE2	50	-	-	-	VCE=10V, IC=1mA
*hFE3	75	-	-	-	VCE=10V, IC=10mA
*hFE4	100	-	300	-	VCE=10V, IC=150mA
*hFE5	40	-	-	-	VCE=10V, IC=500mA
*hFE6	50	-	-	-	VCE=1V, IC=150mA
fT	300	-	-	MHz	IC=20mA VCE=20V, f=100MHz

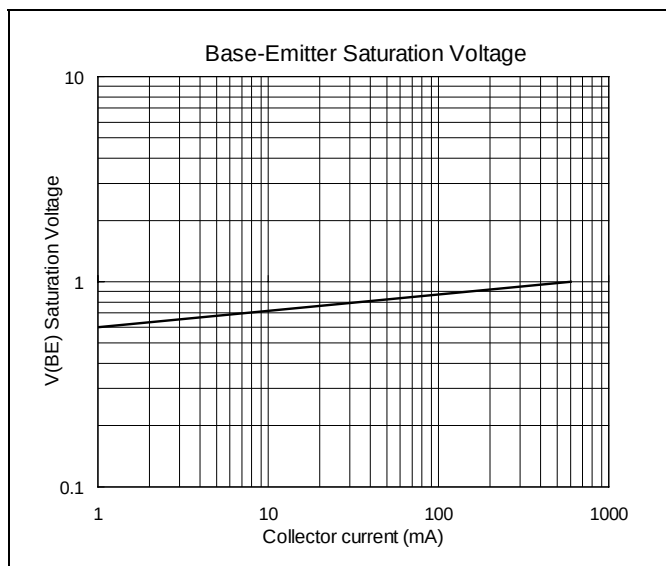
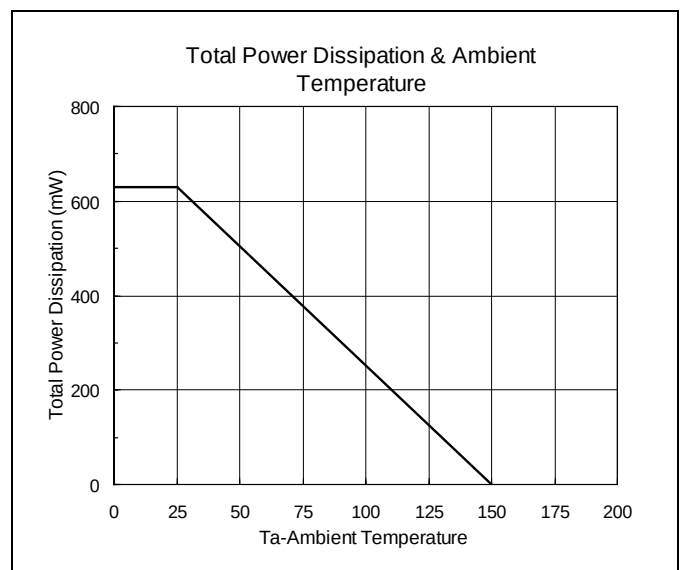
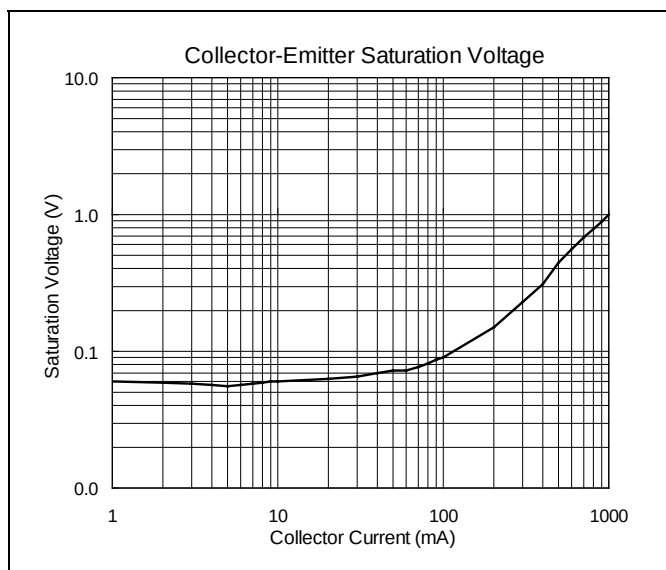
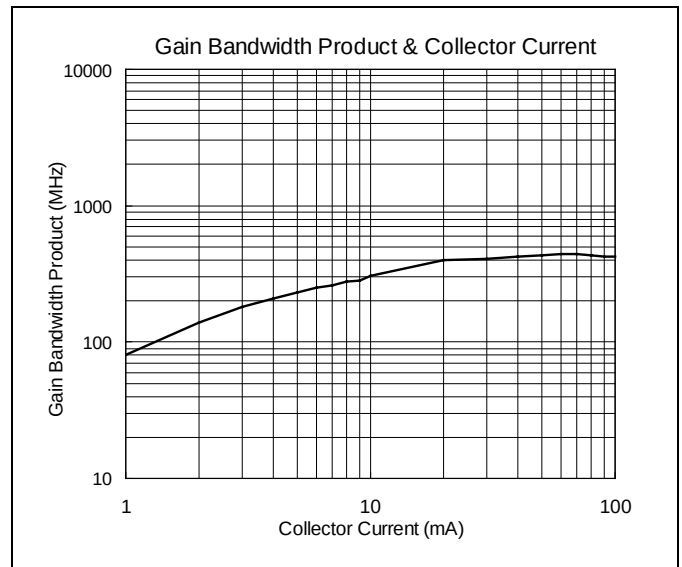
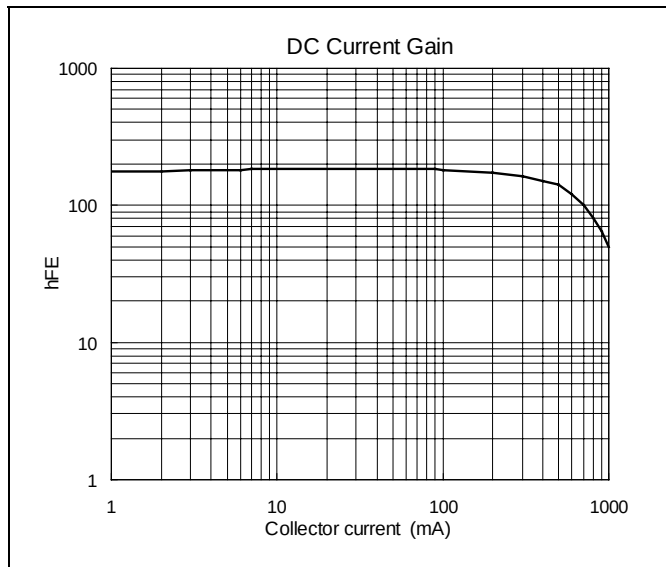
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%



TO-92

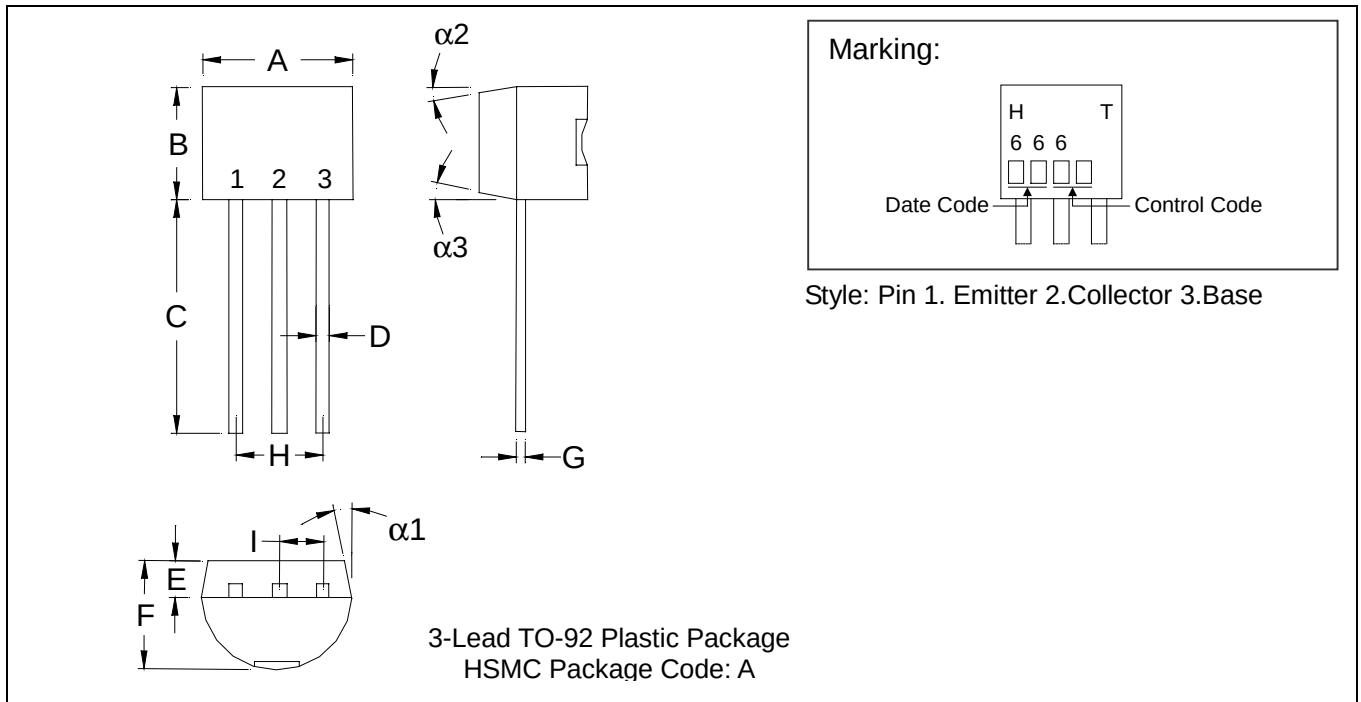


Characteristics Curve





TO-92 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*2°	-	*2°

Notes: 1.Dimension and tolerance based on our Spec. dated Apr. 25,1996.
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