

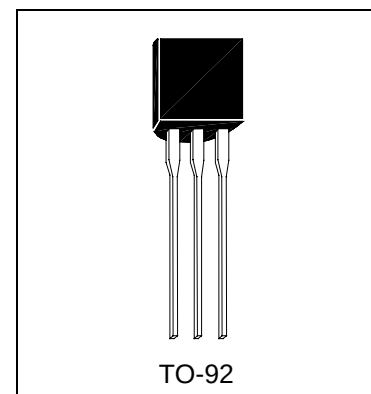


HTL145

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HTL145 is designed for high voltage low power switching applications especially for use in telephone and telecommunication circuits.



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature 150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C)..... 1 W
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage..... 500 V
VCEO Collector to Emitter Voltage 500 V
IC Collector Current 300 mA

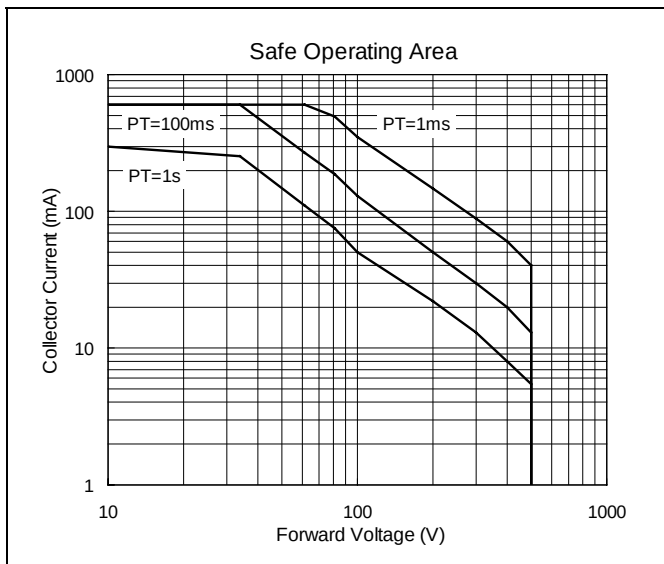
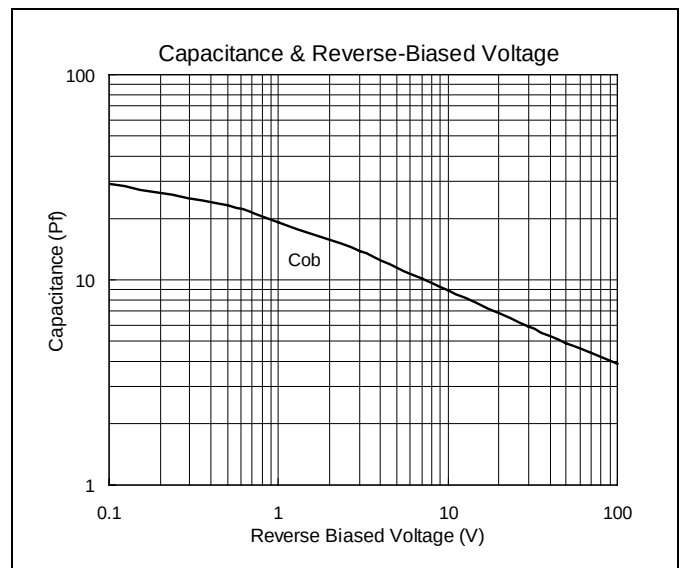
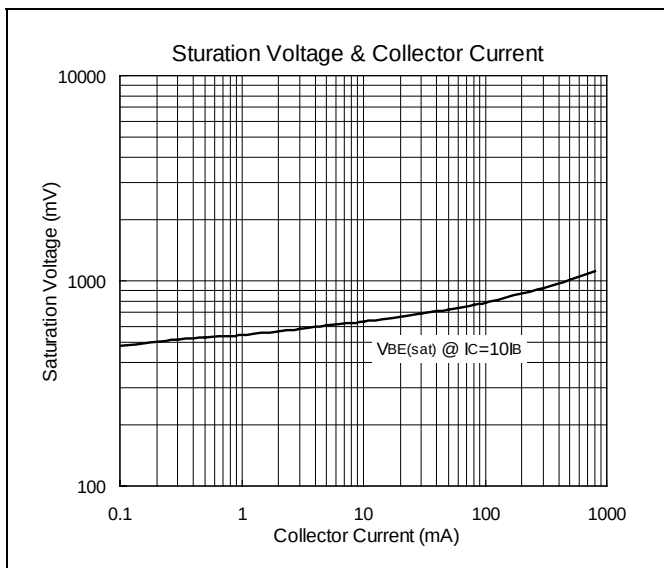
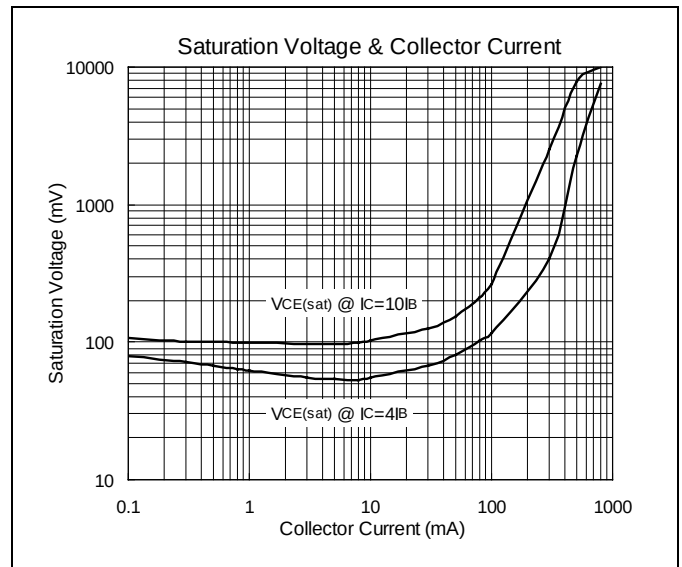
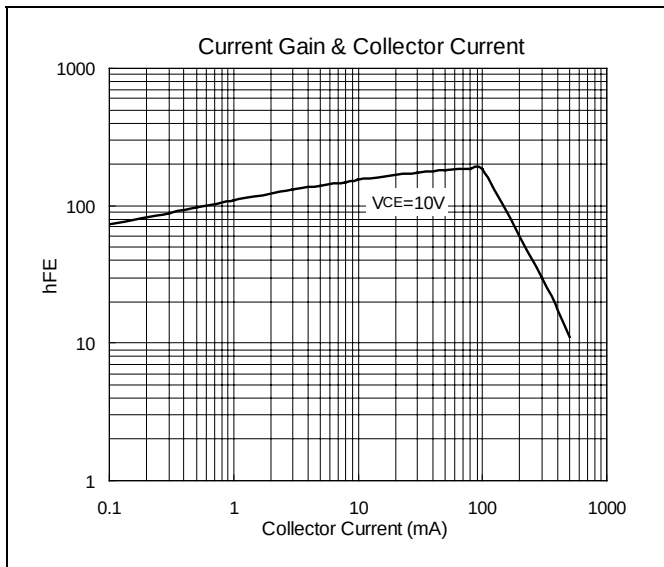
Electrical Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	500	-	-	V	IC=100uA
BVCEO	500	-	-	V	IC=1mA
ICBO	-	-	10	uA	VCB=500V
ICER	-	-	1	uA	VCE=200V
IEBO	-	-	200	nA	VEB=6V
*VCE(sat)1	-	-	500	mV	IC=20mA, IB=2mA
*VCE(sat)2	-	-	3	V	IC=100mA, IB=4mA
*VBE(sat)	-	-	900	mV	IC=20mA, IB=2mA
*hFE1	50	-	-		VCE=10V, IC=1mA
*hFE2	50	-	300		VCE=10V, IC=20mA
*hFE3	40	-	-		VCE=10V, IC=80mA
fT	10	-	-	MHz	VCE=20V, IE=10mA
Cob	-	-	30	pF	VCB=20V, f=1MHZ

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

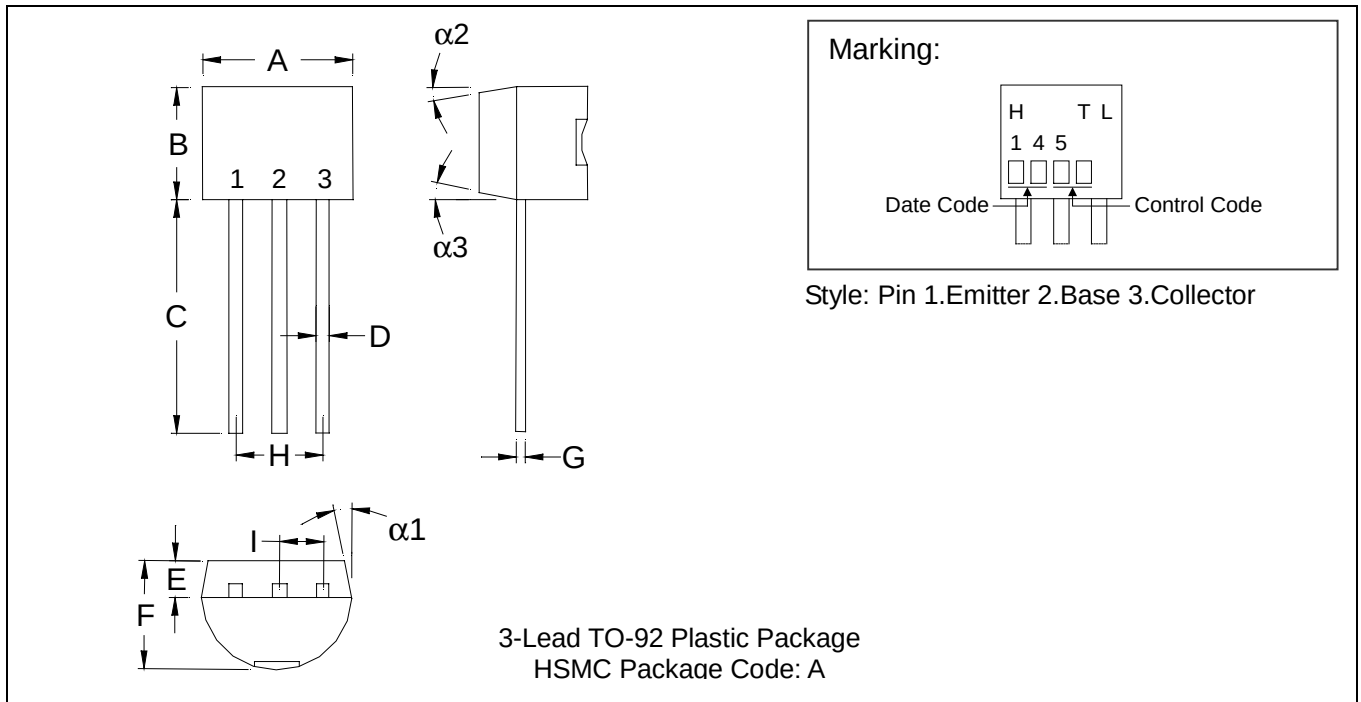


Characteristics Curve





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	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*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