



HTIP102

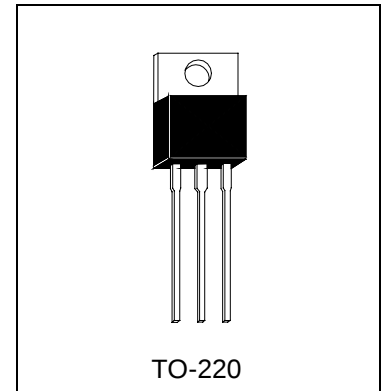
NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HTIP102 is designed for use in general purpose amplifier and low-speed switching applications.

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)..... 80 W
 - Total Power Dissipation (Ta=25°C)..... 2 W
- Maximum Voltages and Currents
 - BVCBO Collector to Base Voltage 100 V
 - BVCEO Collector to Emitter Voltage 100 V
 - BVEBO Emitter to Base Voltage 5 V
 - IC Collector Current 8 A

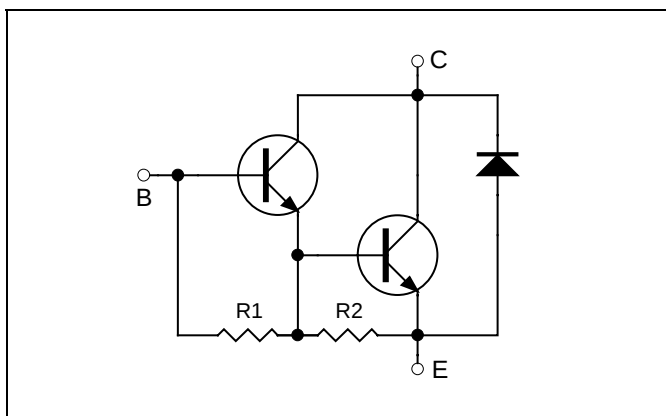


Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	IC=1mA, IE=0
BVCEO	100	-	-	V	IC=30mA, IB=0
ICBO	-	-	50	uA	VCB=100V, IE=0
ICEO	-	-	50	uA	VCE=50V, IB=0
IEBO	-	-	8	mA	VEB=5V, IC=0
*VCE(sat)1	-	-	2	V	IC=3A, IB=6mA
*VCE(sat)2	-	-	2.5	V	IC=8A, IB=80mA
*VBE(on)	-	-	2.8	V	IC=8A, VCE=4V
*hFE1	1	-	20	K	IC=3A, VCE=4V
*hFE2	200	-	-		IC=8A, VCE=4V
Cob	-	-	200	pF	VCB=10V, f=0.1MHz

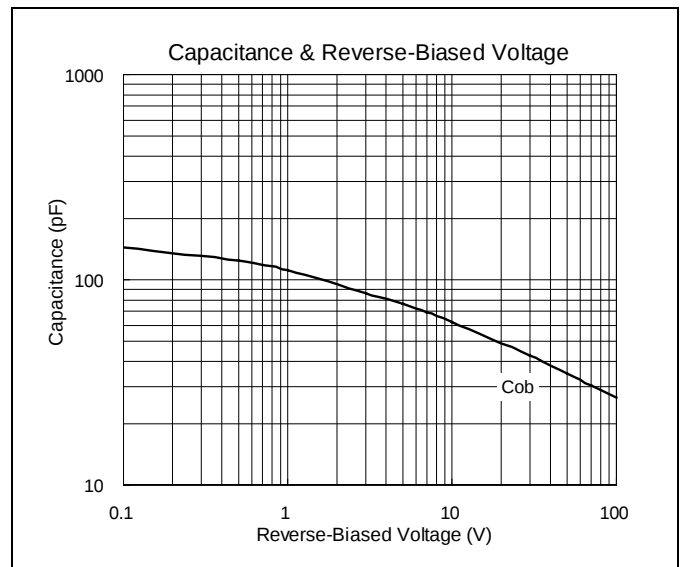
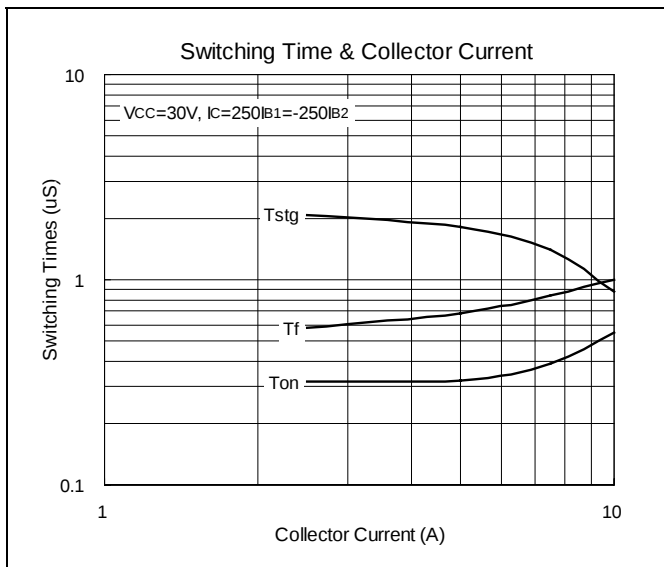
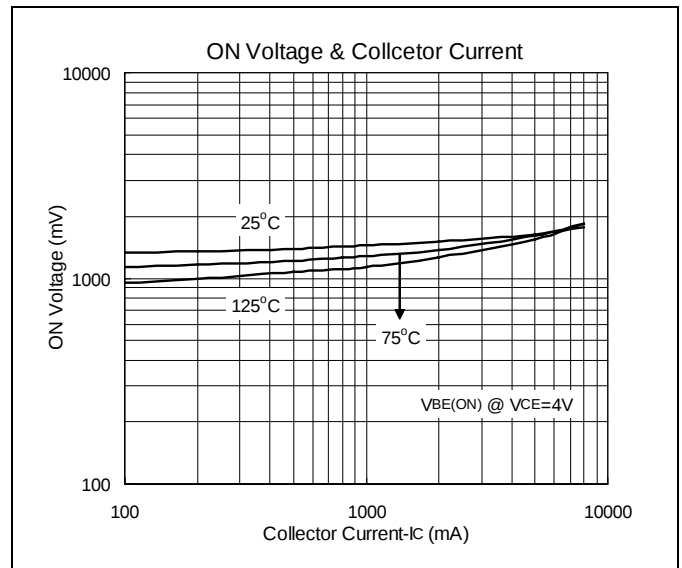
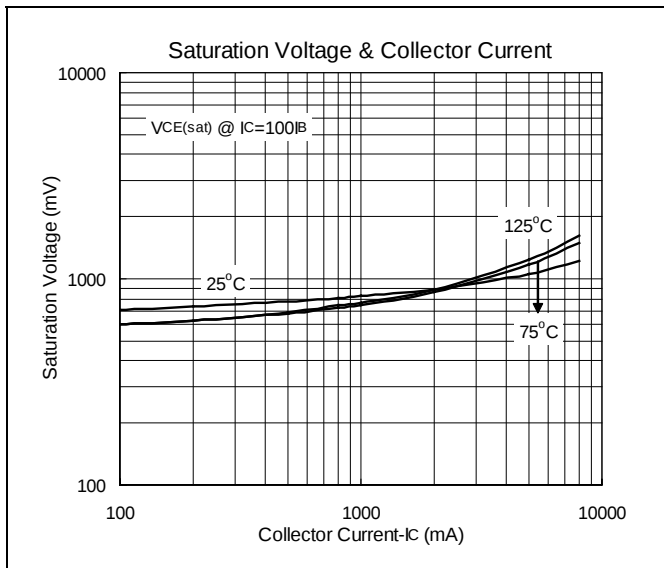
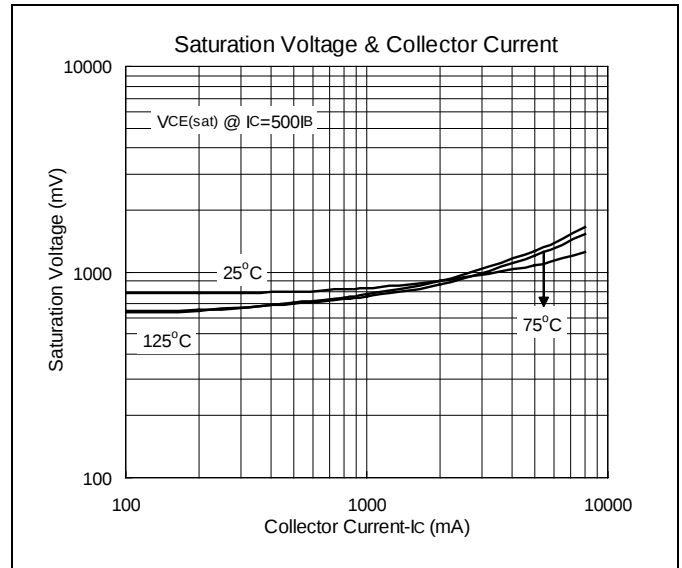
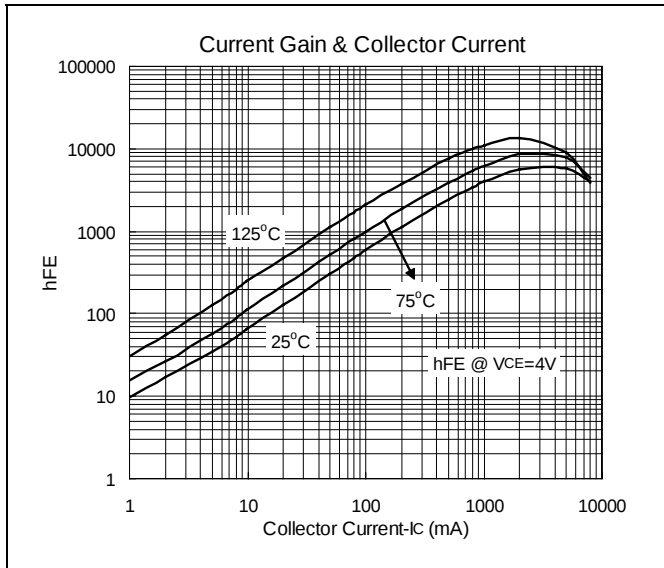
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

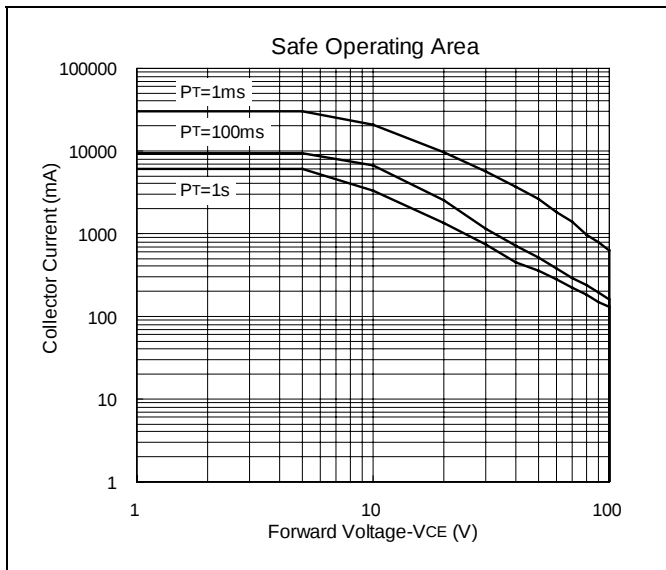
Darlington Schematic





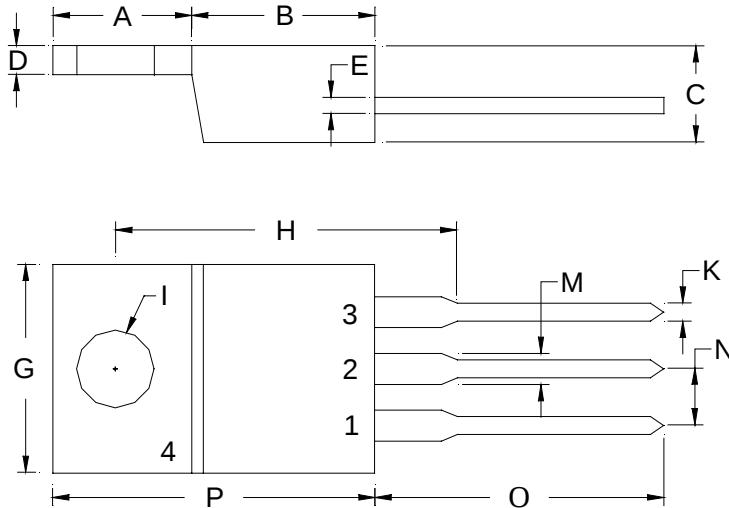
Characteristics Curve



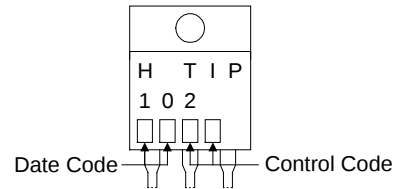




TO-220AB Dimension



Marking:



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

3-Lead TO-220AB Plastic Package
HSMC Package Code: E

*: 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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