



HLB122I

NPN Triple Diffused Planar Type High Voltage Transistor

Description

The HLB122I is a medium power transistor designed for use in switching applications.

Features

- High breakdown voltage
- Low collector saturation voltage
- Fast switching speed

Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C
- Maximum Power Dissipation
Total Power Dissipation (Tc=25°C)..... 30 W
- Maximum Voltages and Currents
BVCBO Collector to Base Voltage 600 V
BVCEO Collector to Emitter Voltage 400 V
BVEBO Emitter to Base Voltage 6 V
IC Collector Current (DC)..... 800 mA
IC Collector Current (Pulse)..... 1600 mA
IB Base Current (DC)..... 100 mA
IB Base Current (Pulse)..... 200 mA

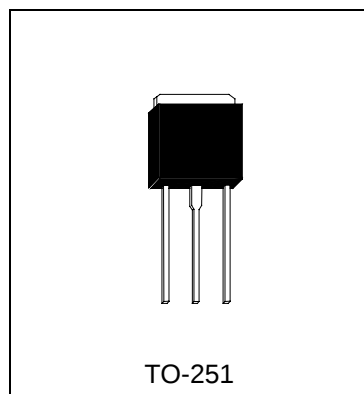
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	600	-	-	V	IC=100uA
BVCEO	400	-	-	V	IC=10mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	10	uA	VCB=600V
ICEO	-	-	10	uA	VCE=400V
IEBO	-	-	10	uA	VEB=6V
*VCE(sat)1	-	-	400	mV	IC=100mA, IB=20mA
*VCE(sat)2	-	-	800	mV	IC=300mA, IB=60mA
*VBE(sat)	-	-	1	V	IC=100mA, IB=20mA
*hFE1	10	-	40		VCE=10V, IC=0.1A
*hFE2	10	-	-		VCE=10V, IC=0.5A
tf	-	-	0.6	uS	VCC=100V, IC=0.3A, IB1=-IB2=0.06A

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

Classification of hFE1

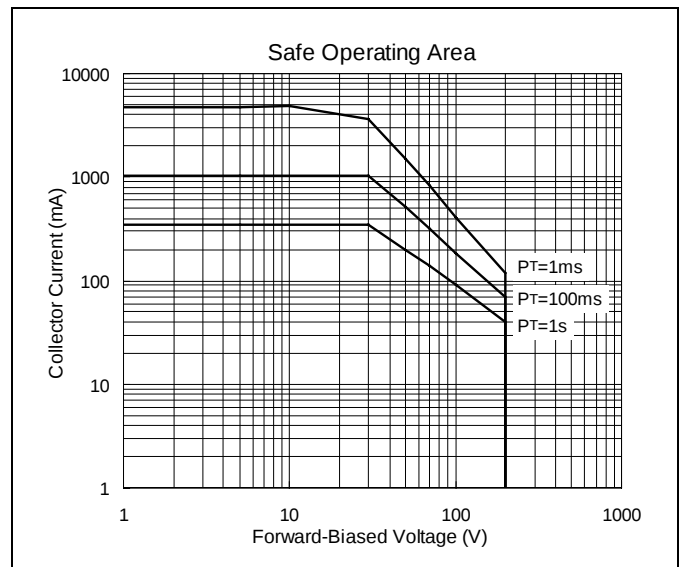
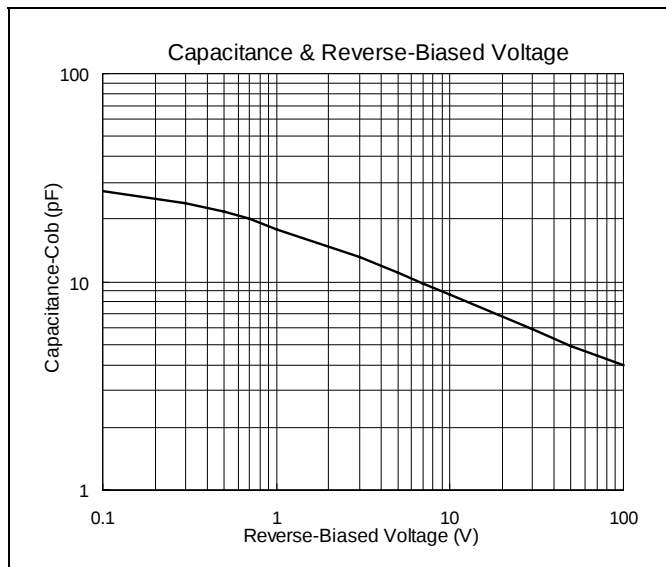
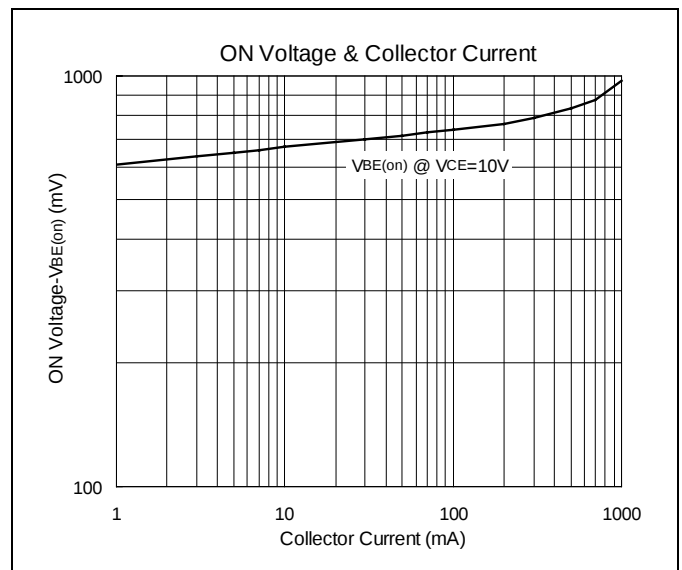
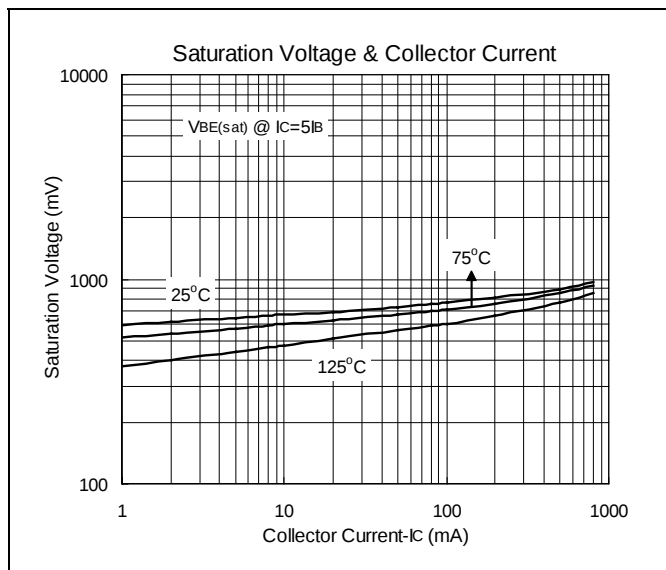
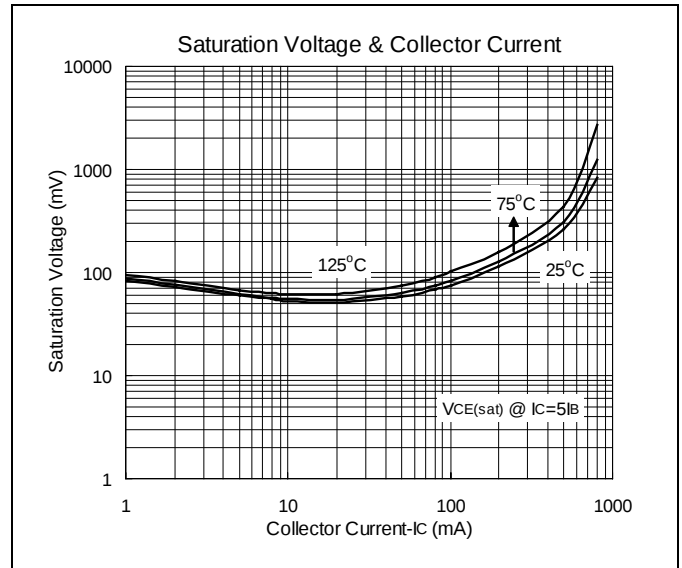
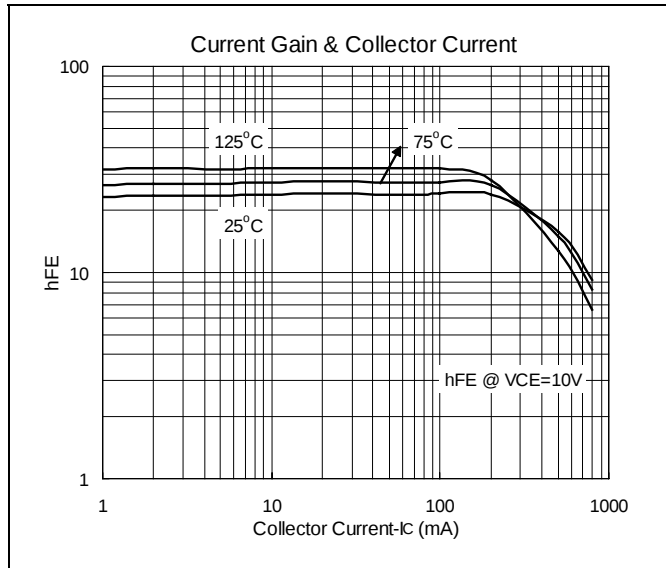
Rank	B1	B2	B3	B4	B5	B6
Range	10-17	13-22	18-27	23-32	28-37	33-40

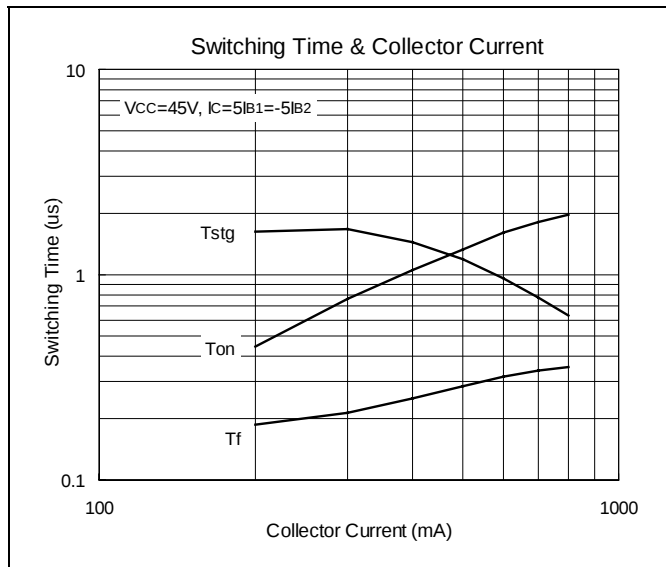


TO-251



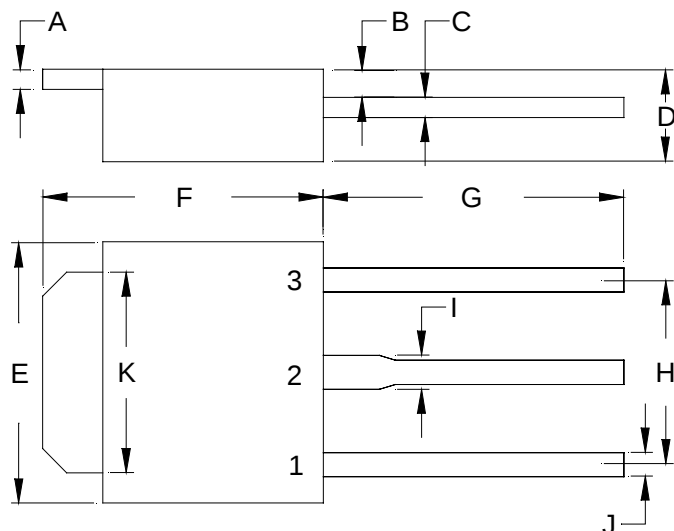
Characteristics Curve





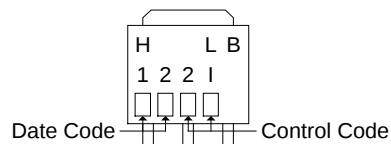


TO-251 Dimension



3-Lead TO-251 Plastic Package
HSMC Package Code: I

Marking:



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

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0177	0.0217	0.45	0.55	G	0.2559	-	6.50	-
B	0.0354	0.0591	0.90	1.50	H	-	*0.1811	-	*4.60
C	0.0177	0.0236	0.45	0.60	I	-	0.0354	-	0.90
D	0.0866	0.0945	2.20	2.40	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2677	0.2835	6.80	7.20					

Notes: 1.Dimension and tolerance based on our Spec. dated May. 24,1995.
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

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