



HLB120A

NPN Triple Diffused Planar Type High Voltage Transistors

Description

The HLB120A is a medium power transistor designed for use in switching applications.

Features

- High Breakdown Voltage
- Low Collector Saturation Voltage
- Fast Switching Speed

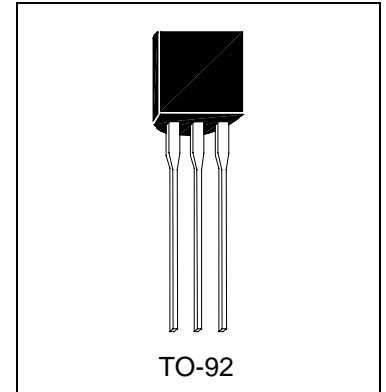
Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 625 mW
Total Power Dissipation (Tc=25°C) 7 W
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage 600 V
VCEO Collector to Emitter Voltage 400 V
VEBO Emitter to Base Voltage 6 V
IC Collector Current (DC) 100 mA
IC Collector Current (Pulse) 200 mA
IB Base Current (DC) 20 mA
IB Base Current (Pulse) 40 mA

Characteristics (Ta=25°C)

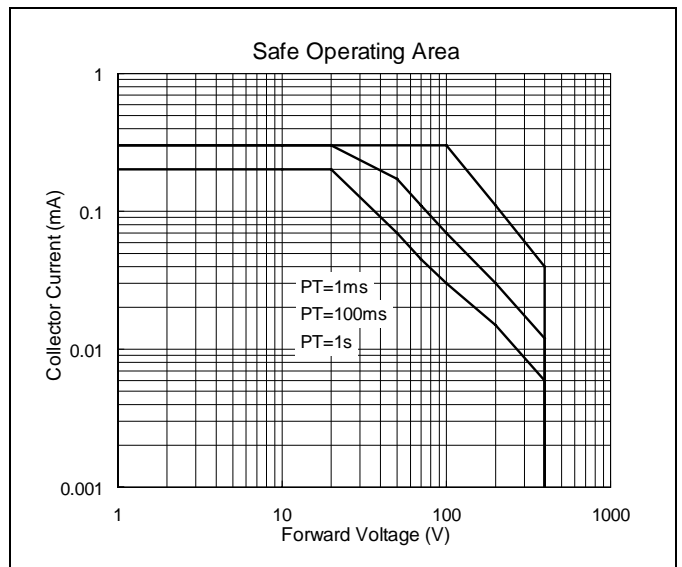
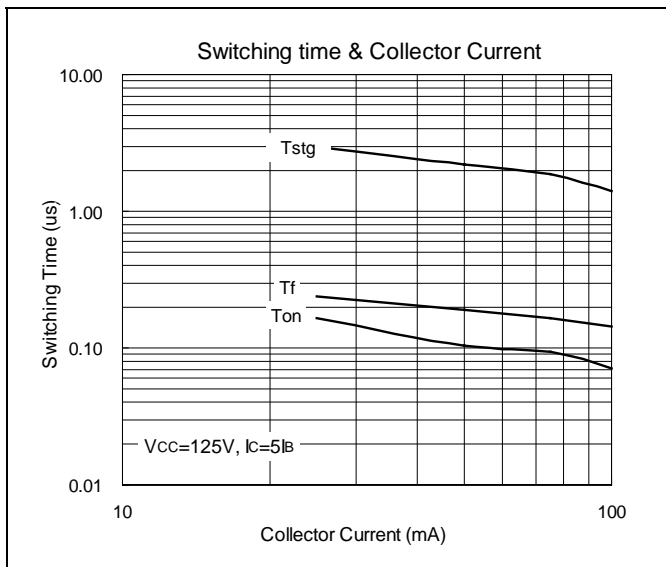
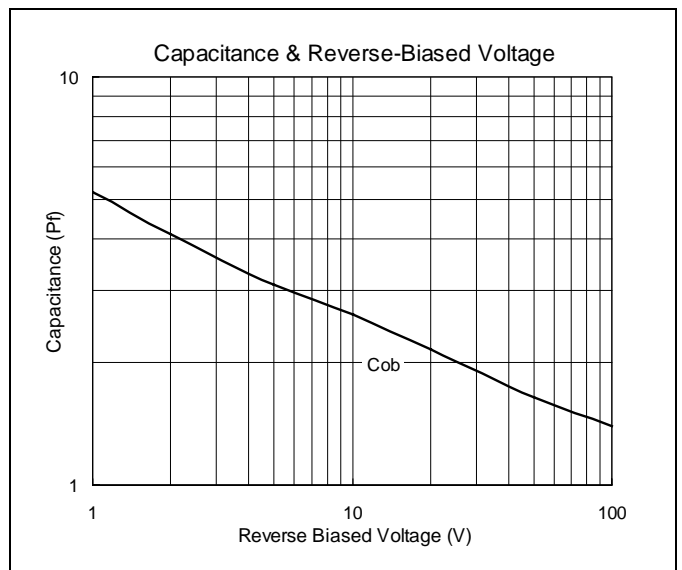
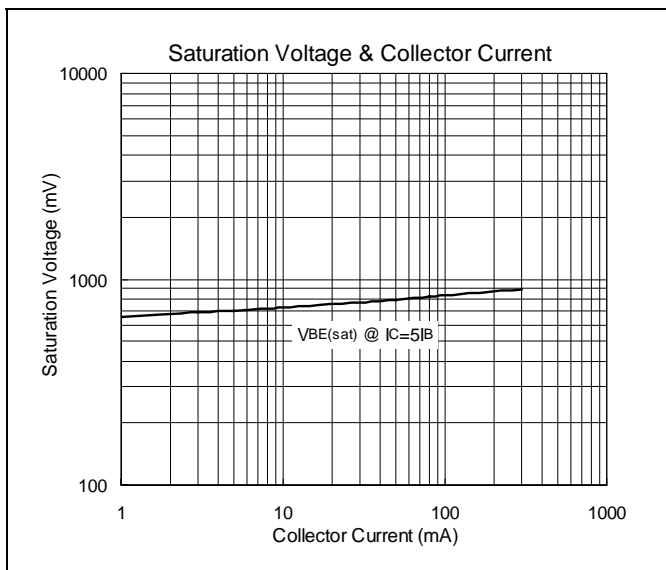
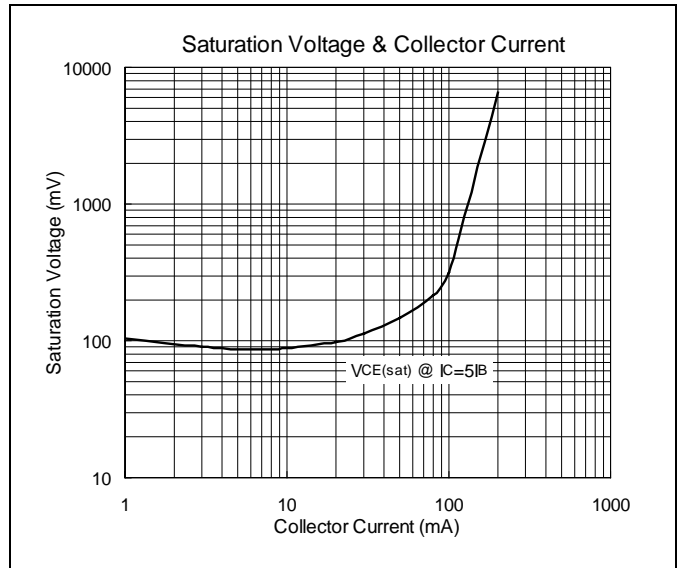
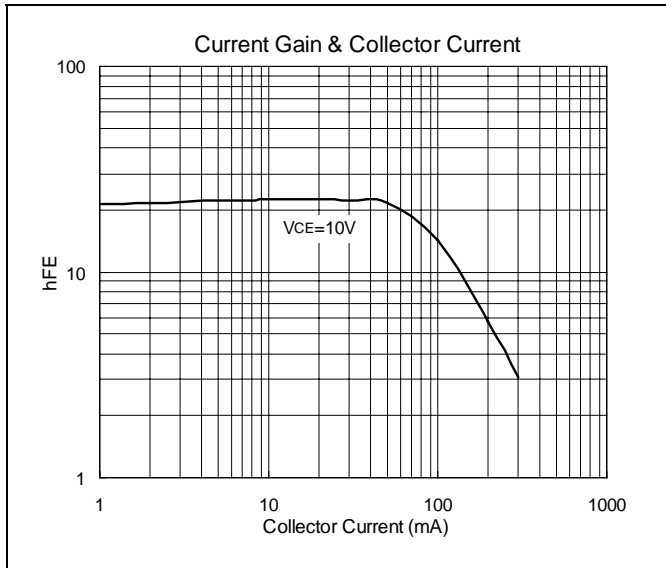
Symbol	Min.	Typ.	Max	Unit	Test Conditions
BVCBO	600	-	-	V	IC=100uA, IE=0
BVCEO	400	-	-	V	IC=10mA, IB=0
BVEBO	6	-	-	V	IE=10uA,, IC=0
ICBO	-	-	10	uA	VCB=550V
ICEO	-	-	10	uA	VCE=400V, IB=0
IEBO	-	-	10	uA	VEB=6V, IC=0
*VCE(sat)1	-	-	400	mV	IC=50mA, IB=10mA
*VCE(sat)2	-	-	750	mV	IC=100mA, IB=20mA
*VBE(sat)	-	-	1	V	IC=50mA, IB=10mA
*hFE1	8	-	-		VCE=10V, IC=10mA
*hFE2	10	-	36		VCE=10V, IC=50mA

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



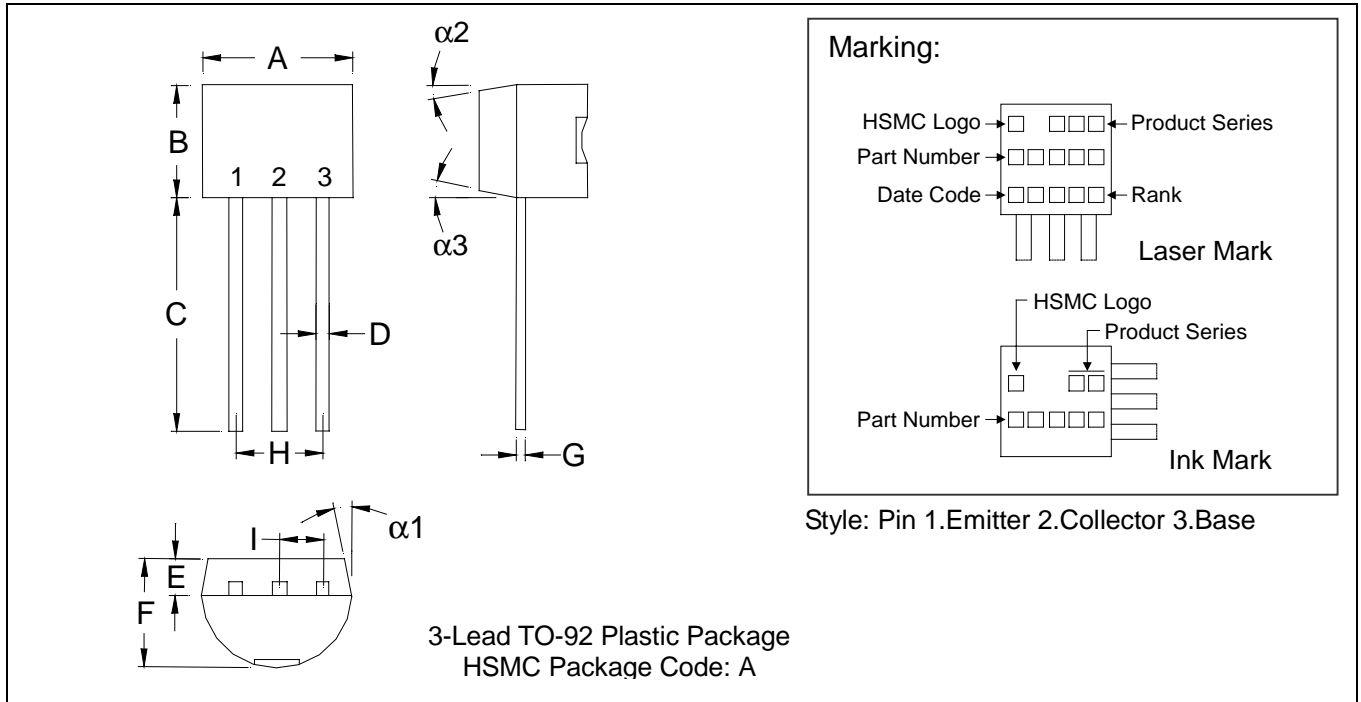


Characteristics Curve





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	$\alpha 1$	-	*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

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