



HLB120A

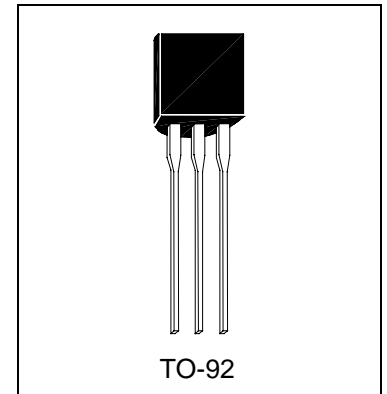
NPN Triple Diffused Planar Type High Voltage Transistors

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

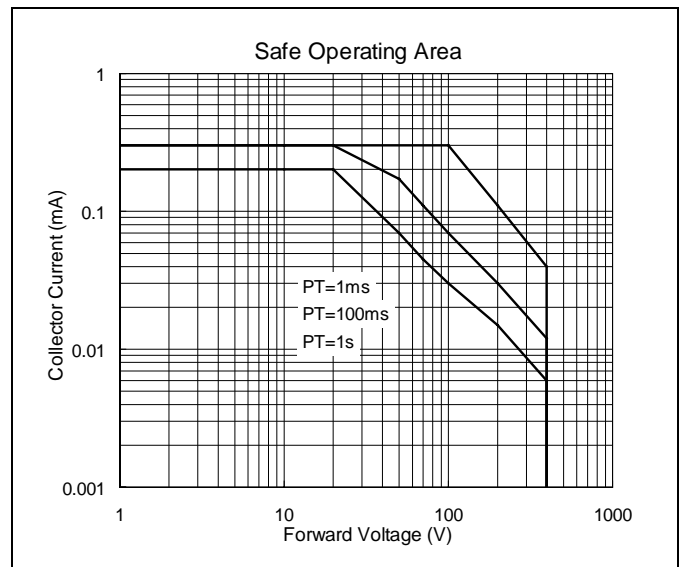
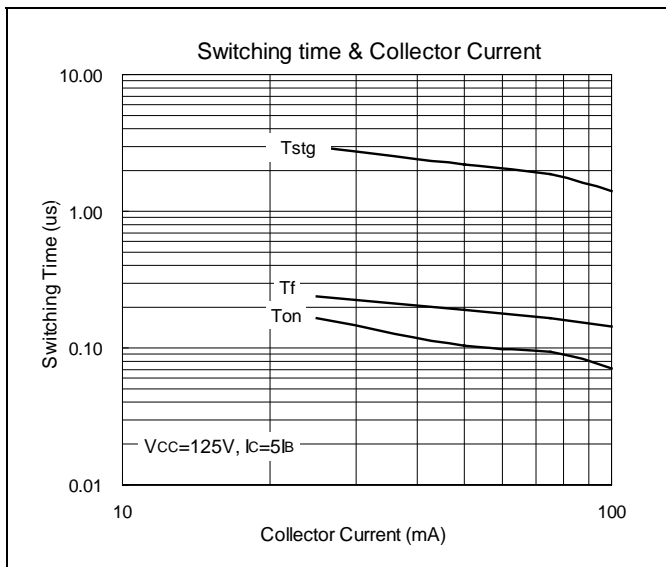
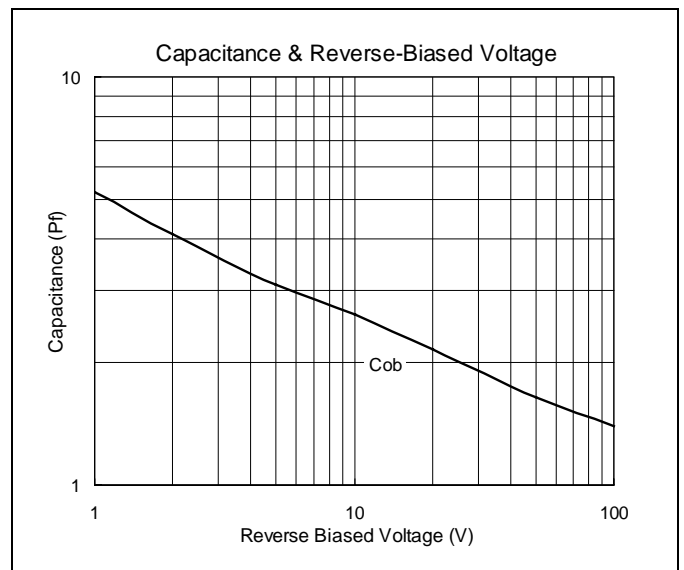
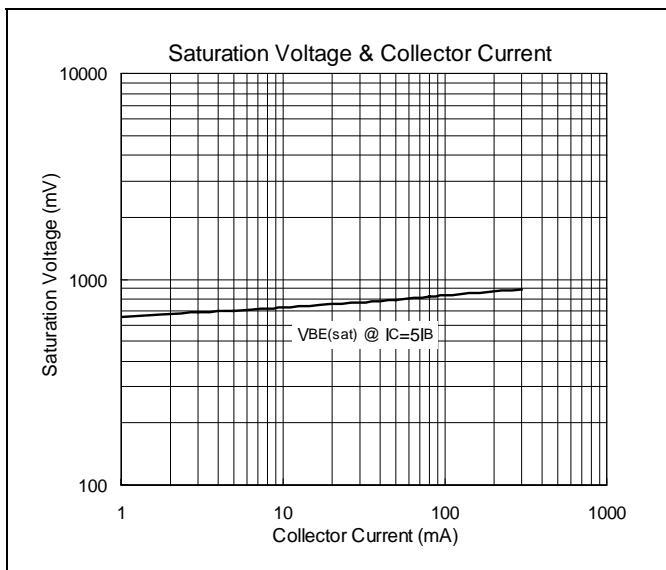
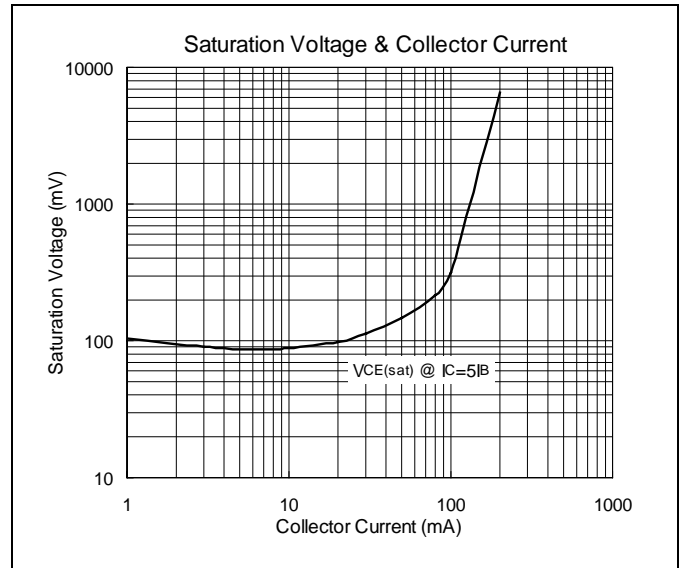
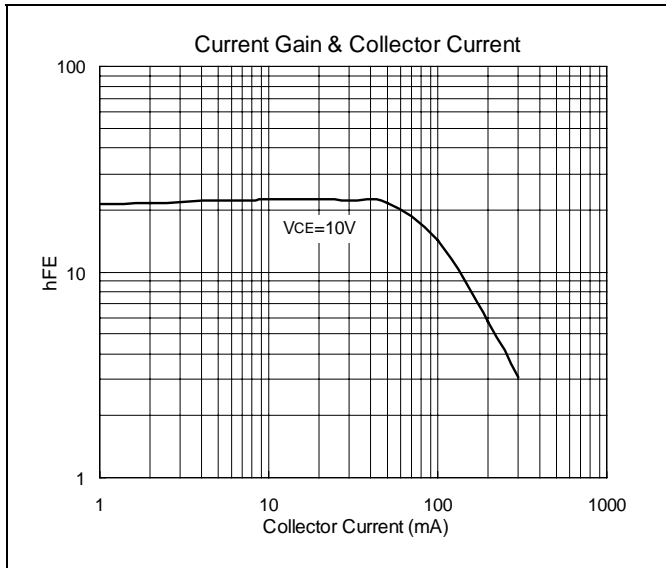
Characteristics (Ta=25°C)

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%

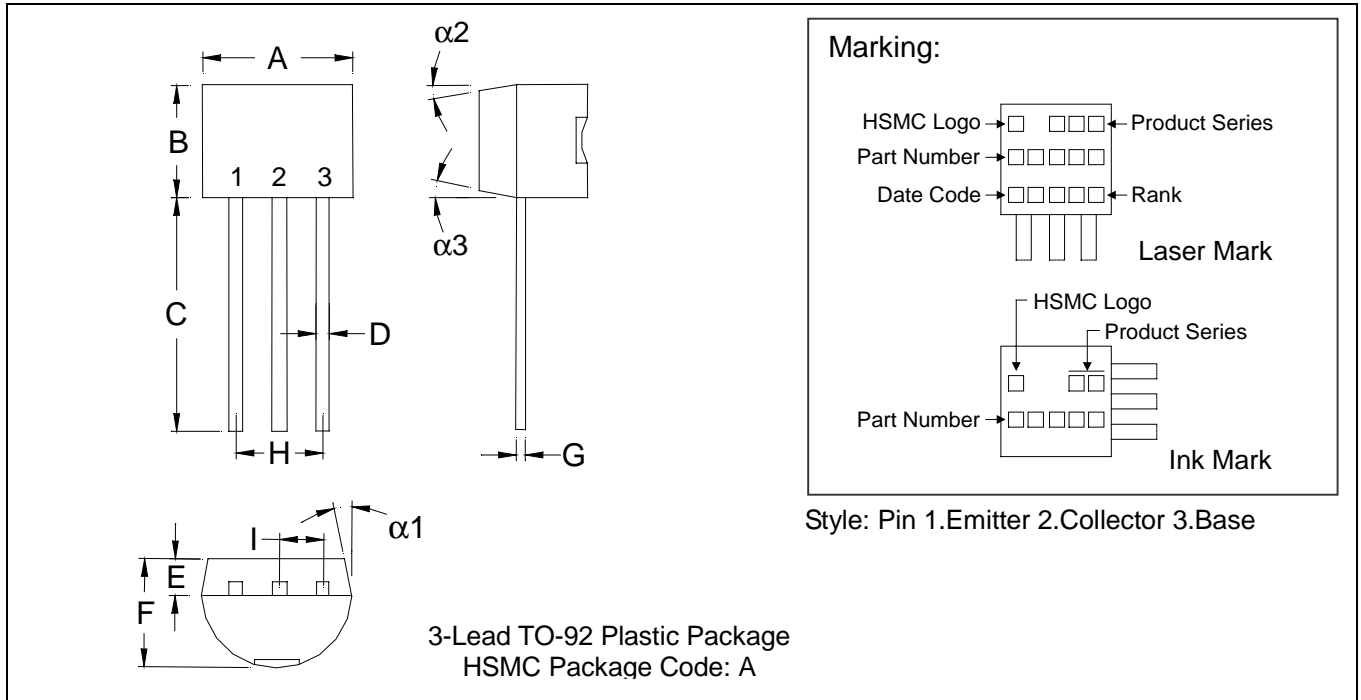


Characteristics Curve





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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