



# HLB121J

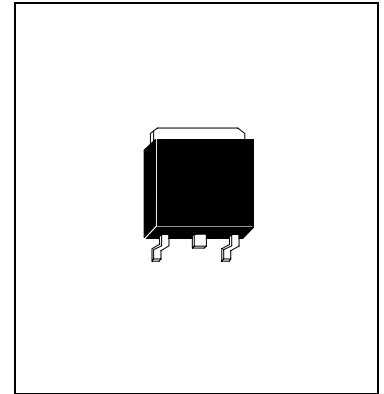
NPN Triple Diffused Planar Type High Voltage Transistor

## Description

The HLB121J 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) ..... 10 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) ..... 300 mA  
IC Collector Current (Pulse) ..... 600 mA  
IB Base Current (DC) ..... 40 mA  
IB Base Current (Pulse) ..... 100 mA

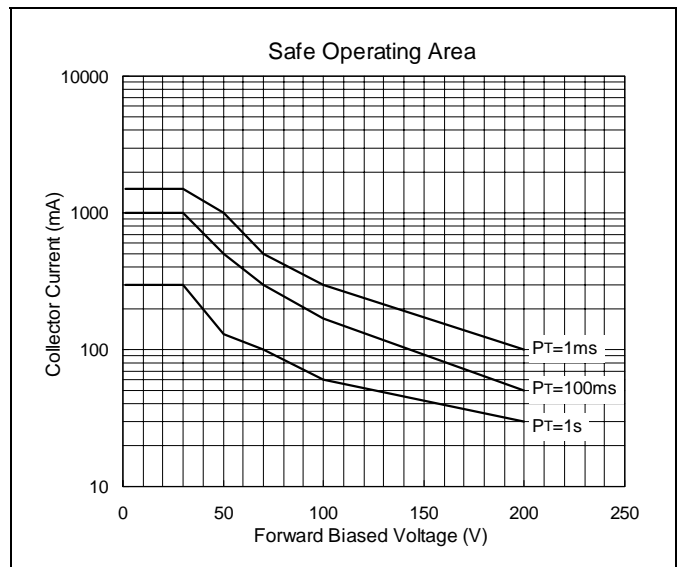
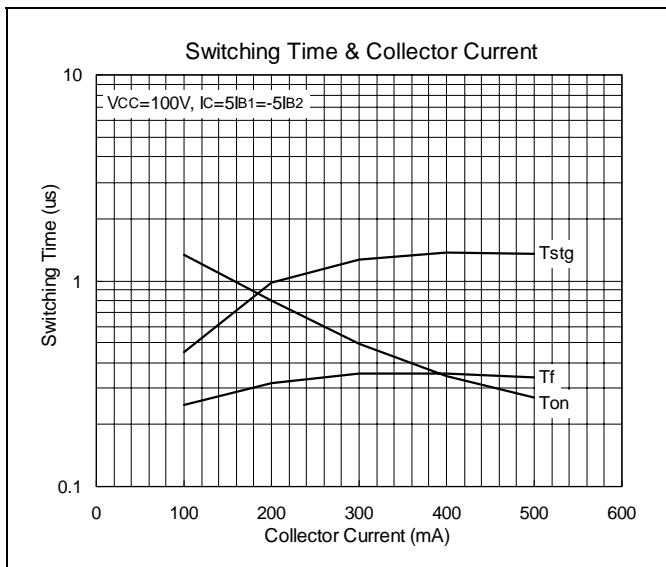
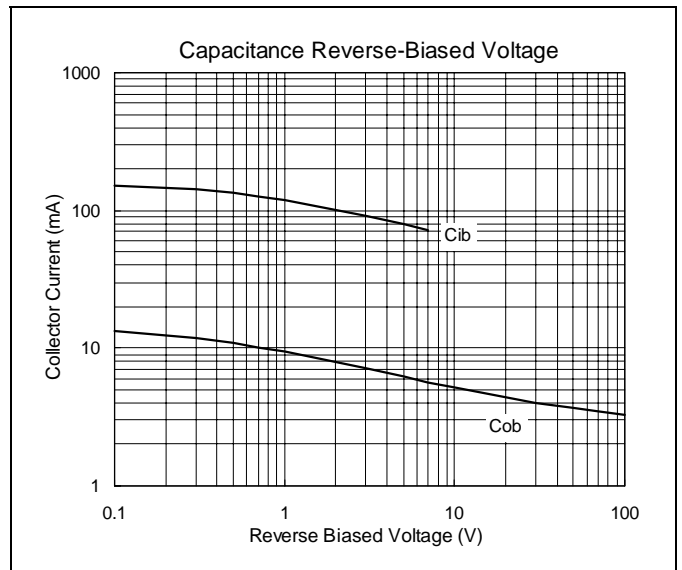
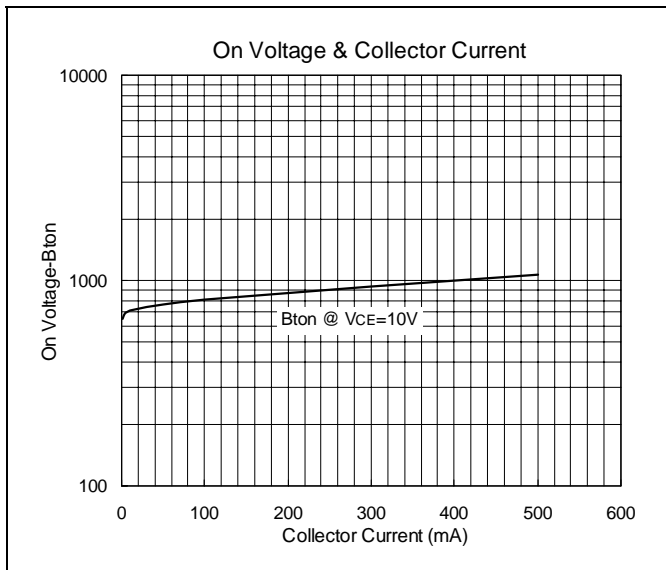
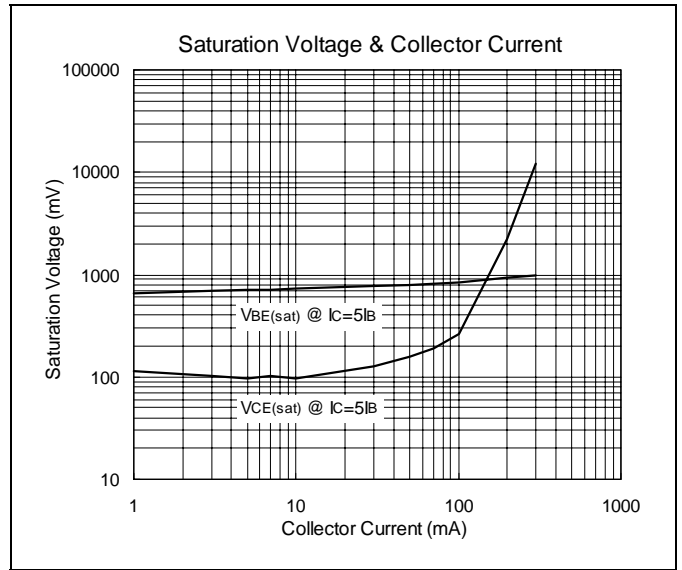
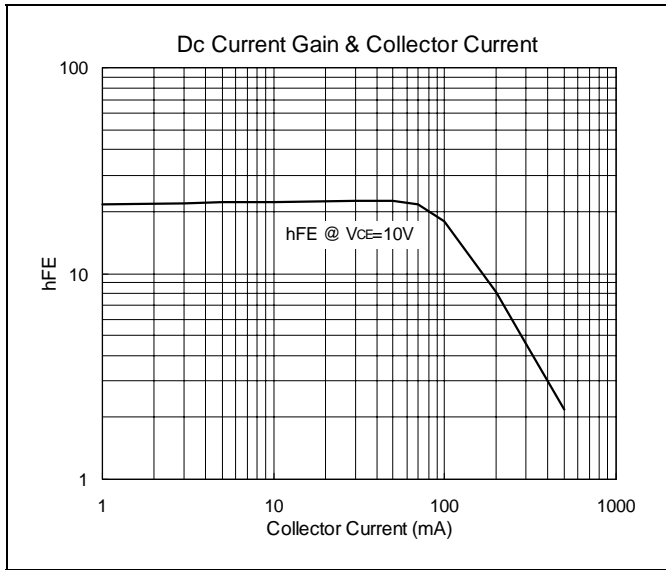
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	600	-	-	V	IC=100uA
BVCEO	400	-	650	V	IC=10mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	10	uA	VCB=550V
ICEO	-	-	10	uA	VCB=400V
IEBO	-	-	10	uA	VEB=6V
*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%

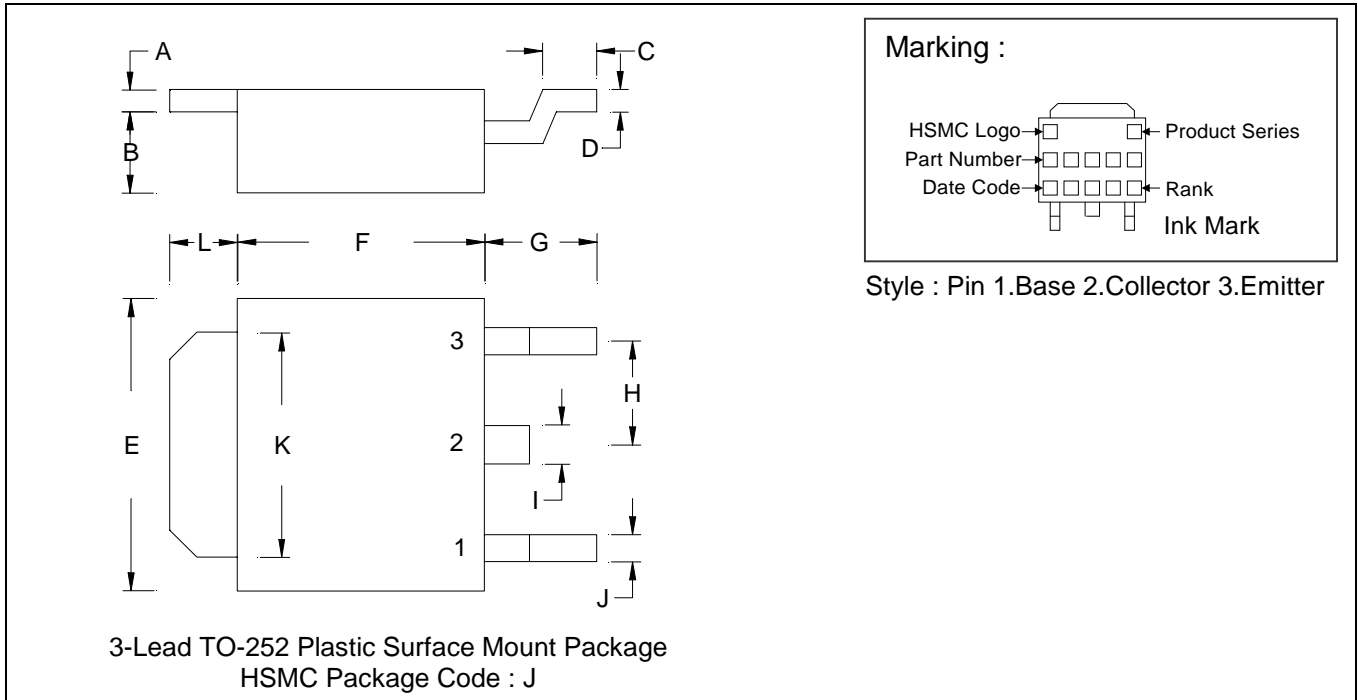


### Characteristics Curve





### TO-252 Dimension



\*: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	0.0866	0.1102	2.20	2.80
B	0.0650	0.0768	1.65	1.95	H	-	*0.0906	-	*2.30
C	0.0354	0.0591	0.90	1.50	I	-	0.0354	-	0.90
D	0.0177	0.0236	0.45	0.60	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2125	0.2283	5.40	5.80	L	0.0551	0.0630	1.40	1.60

- Notes : 1.Dimension and tolerance based on our Spec. dated May. 05,1996.  
 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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