

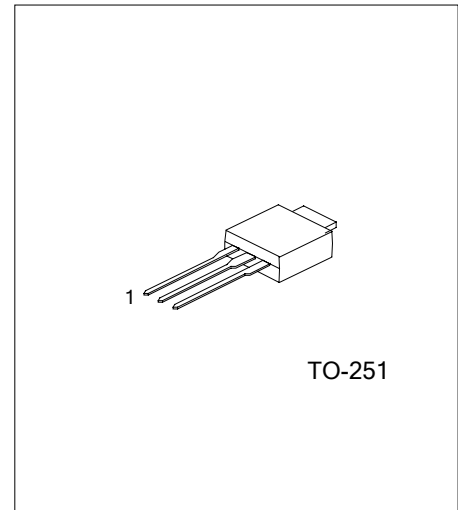
## NPN TRIPLE DIFFUSED PLANAR TYPE HIGH VOLTAGE TRANSISTOR

### DESCRIPTION

The UTC HLB121 is a medium power transistor designed for use in switching applications.

### FEATURES

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



1: BASE 2: COLLECTOR 3: EMITTER

\*Pb-free plating product number:HLB121L

### ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	600	V
Collector-Emitter Voltage	$V_{CEO}$	400	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current (DC)	$I_C$	300	mA
Collector Current (Pulse)	$I_{CP}$	600	mA
Base Current (DC)	$I_B$	40	mA
Base Current (Pulse)	$I_{BP}$	100	mA
Total Power Dissipation (Tc=25°C)	$P_C$	10	W
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-40 ~ +150	°C

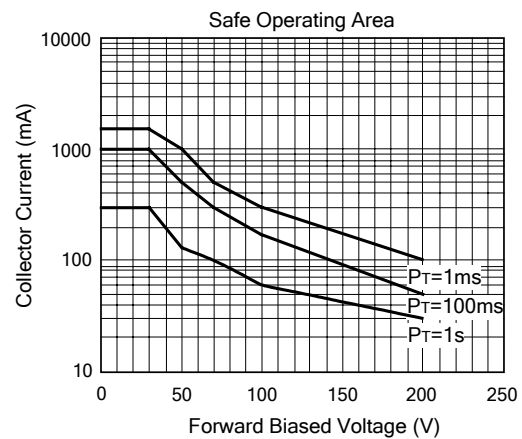
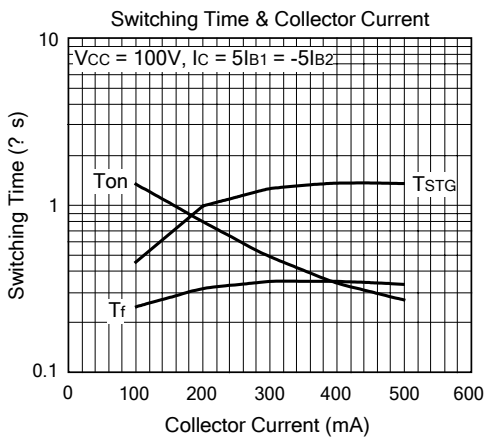
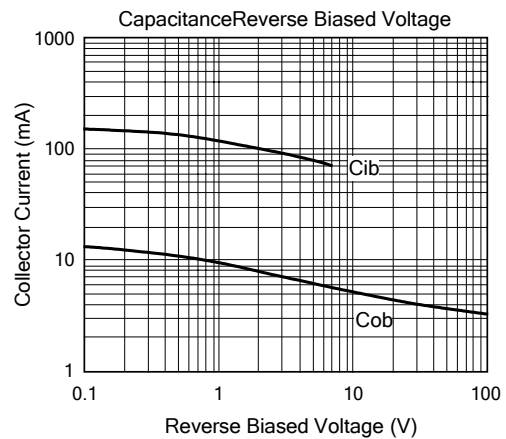
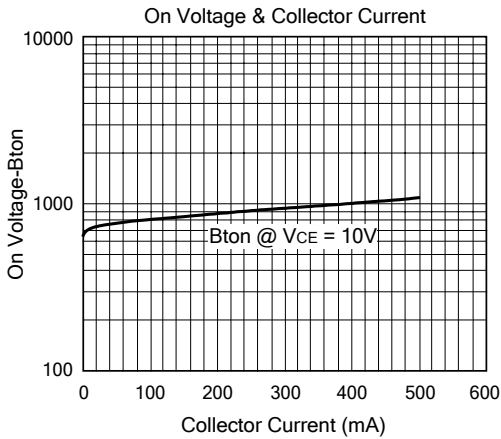
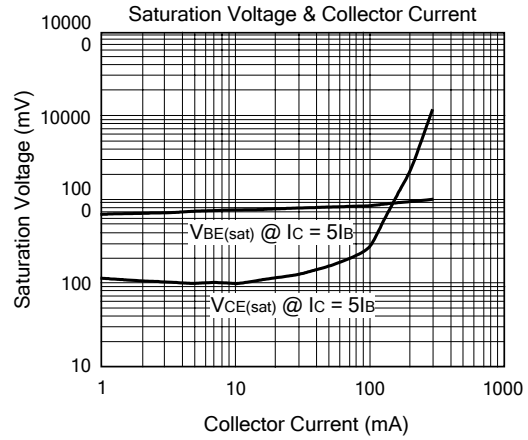
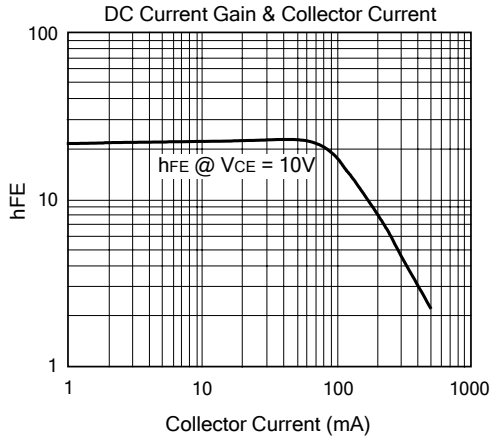
### ELECTRICAL CHARACTERISTICS

(Ta=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = 100\mu A$	600			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = 10mA$	400			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 10\mu A$	6			V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 550V$			10	$\mu A$
Collector Cutoff Current	$I_{CEO}$	$V_{CB} = 400V$			10	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 6V$			10	$\mu A$
C-E Saturation Voltage	* $V_{CE(sat)1}$	$I_C = 50mA, I_B = 10mA$			400	mV
	* $V_{CE(sat)2}$	$I_C = 100mA, I_B = 20mA$			750	mV
B-E Saturation Voltage	* $V_{BE(sat)}$	$I_C = 50mA, I_B = 10mA$			1	V
DC Current Gain	* $h_{FE1}$	$V_{CE} = 10V, I_C = 10mA$	8			
	* $h_{FE2}$	$V_{CE} = 10V, I_C = 50mA$	10		36	

\*Pulse Test : Pulse Width  $\leq 380\mu s$ , Duty Cycle  $\leq 2\%$

CHARACTERISTICS CURVE



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