



ULB121

NPN SILICON TRANSISTOR

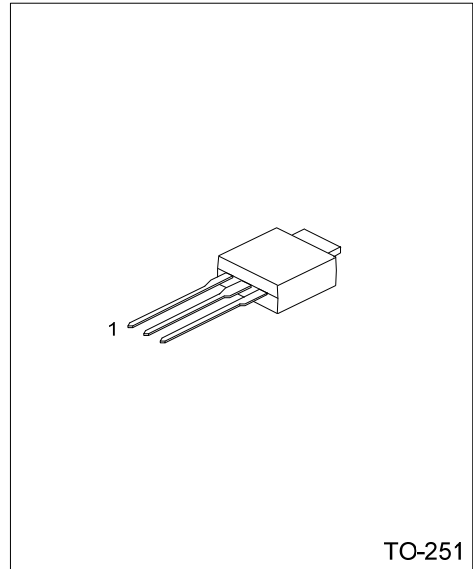
NPN TRIPLE DIFFUSED PLANAR TYPE HIGH VOLTAGE TRANSISTOR

DESCRIPTION

The UTC **ULB121** is a medium power transistor designed for use in switching applications.

FEATURES

- * High breakdown voltage
- * Low collector saturation voltage
- * Fast switching speed
- * Halogen Free



ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
ULB121G-TM3-T	TO-251	B	C	E	Tube

<p>ULB121G-TM3-T</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Halogen Free</p>	<p>(1) T: Tube</p> <p>(2) TM3: TO-251</p> <p>(3) G: Halogen Free</p>
--	--



■ ABSOLUTE MAXIMUM RATING (T_A=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	300	mA
	Pulse	600	mA
Base Current	DC	40	mA
	Pulse	100	mA
Total Power Dissipation (T _C =25°C)	P _D	10	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-40 ~ +150	°C

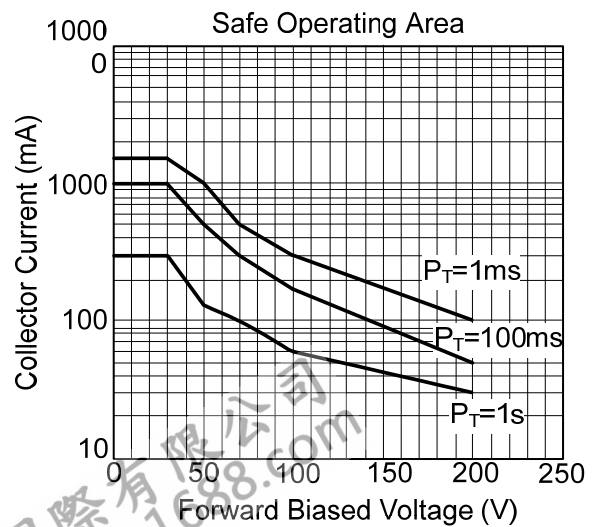
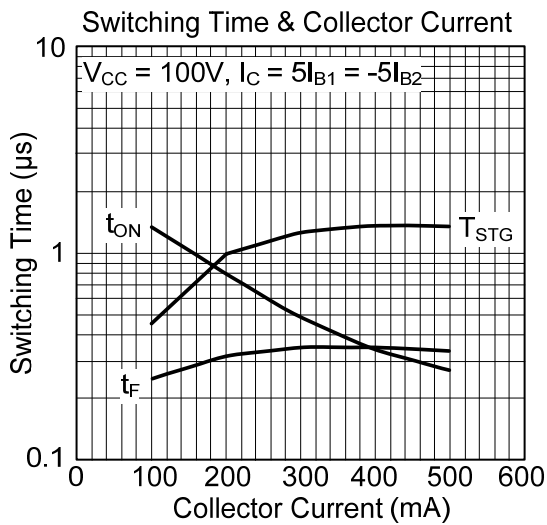
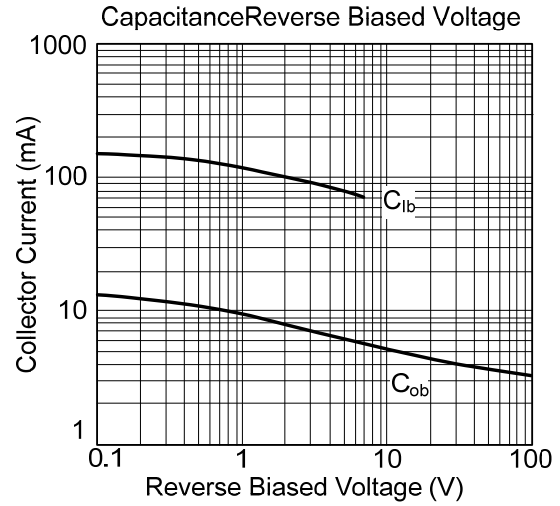
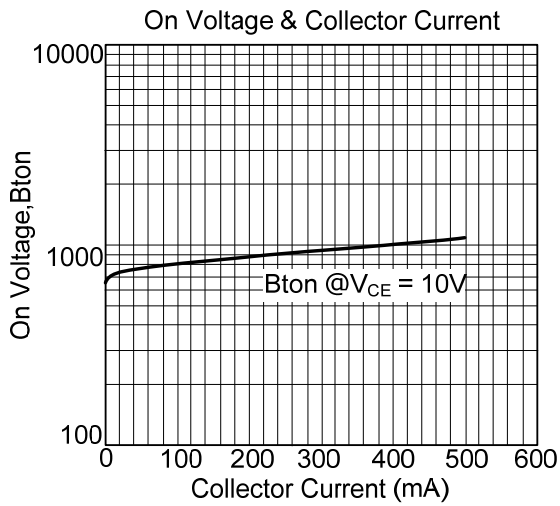
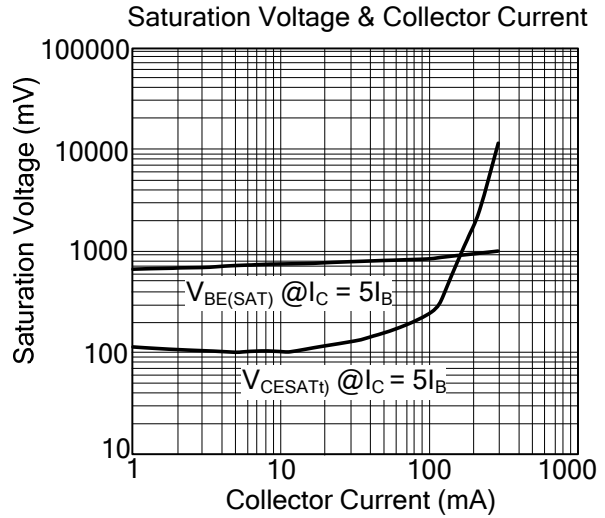
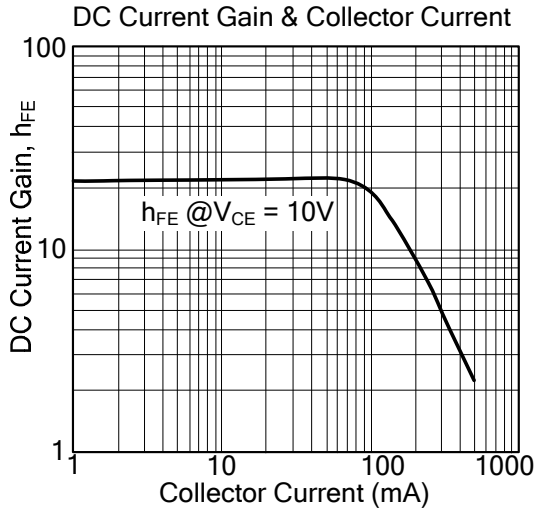
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS						
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =100μA	600			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =10mA	400			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA	6			V
Collector Cutoff Current	I _{CBO}	V _{CB} =550V			10	μA
Collector Cutoff Current	I _{CEO}	V _{CB} =400V			10	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =6V			10	μA
ON CHARACTERISTICS						
DC Current Gain(Note)	h _{FE1}	V _{CE} =10V, I _C =10mA	8			
	h _{FE2}	V _{CE} =10V, I _C =50mA	10		36	
Collector-Emitter Saturation Voltage (Note)	V _{CE(SAT)}	I _C =50mA, I _B =10mA			400	mV
		I _C =100mA, I _B =20mA			750	
Base-Emitter Saturation Voltage (Note)	V _{BE(SAT)}	I _C =50mA, I _B =10mA			1	V

Note: Pulse Test : Pulse Width ≤380μs, Duty Cycle≤2%

TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.