



ULB121

NPN SILICON TRANSISTOR

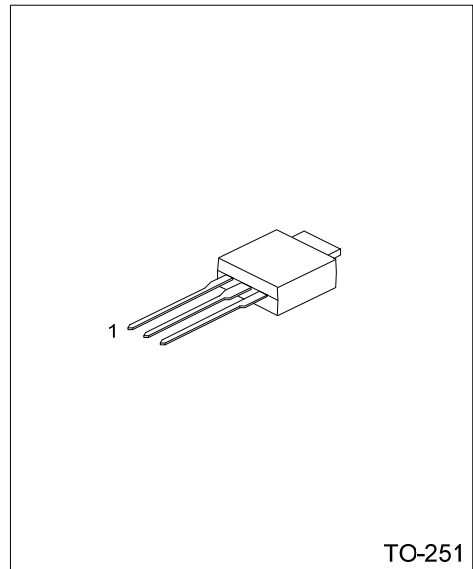
NPN TRIPLE DIFFUSED PLANAR TYPE HIGH VOLTAGE TRANSISTOR

■ 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>
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■ 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

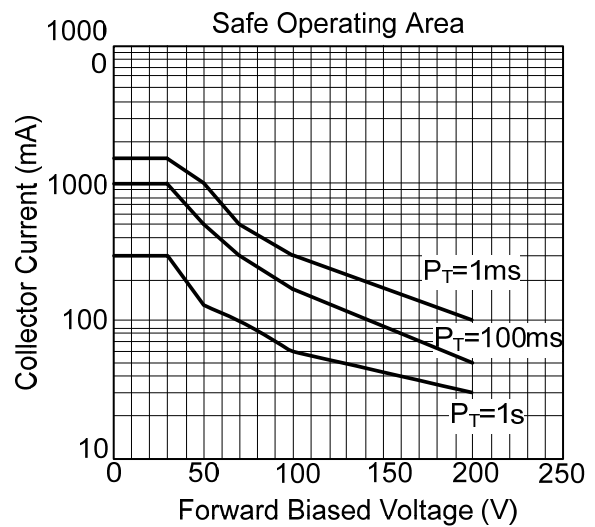
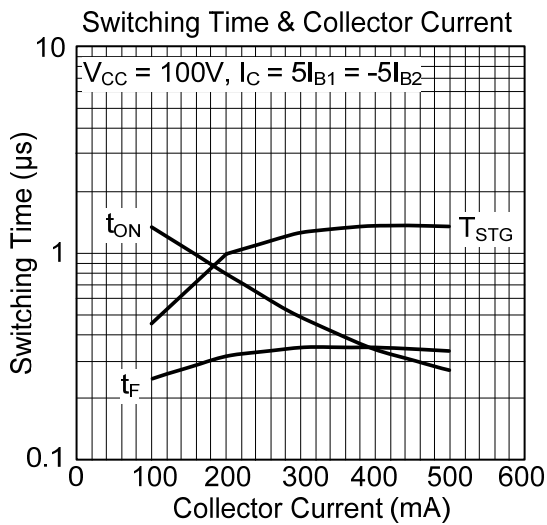
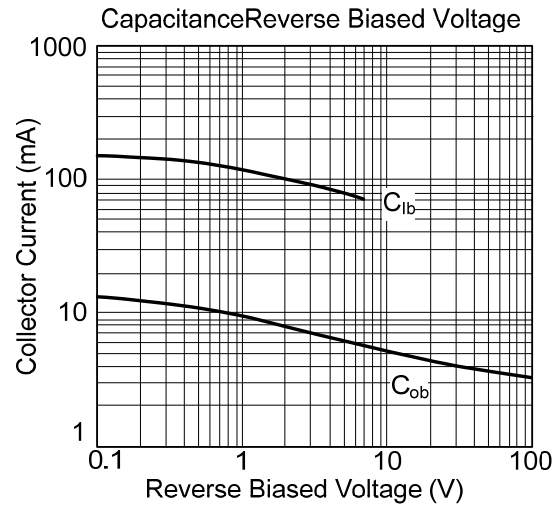
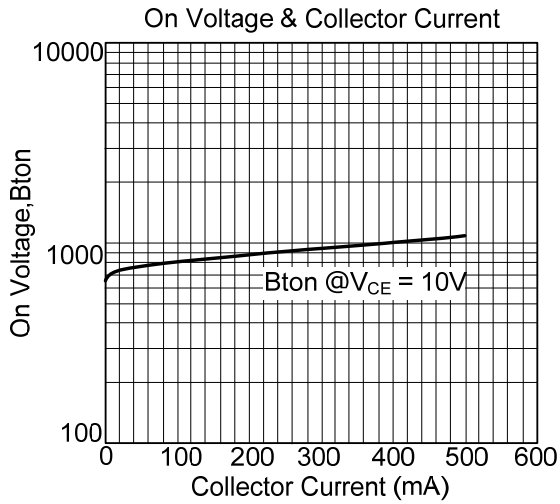
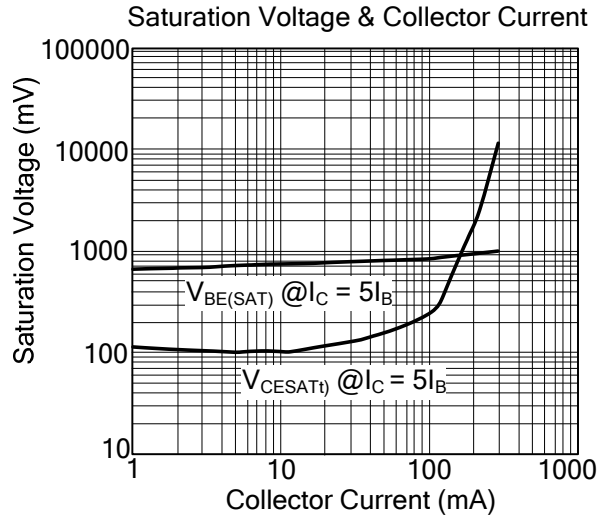
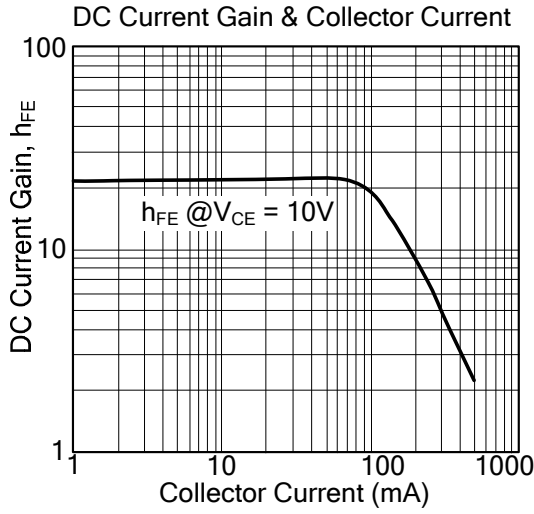
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ 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



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