



ULB121

NPN SILICON TRANSISTOR

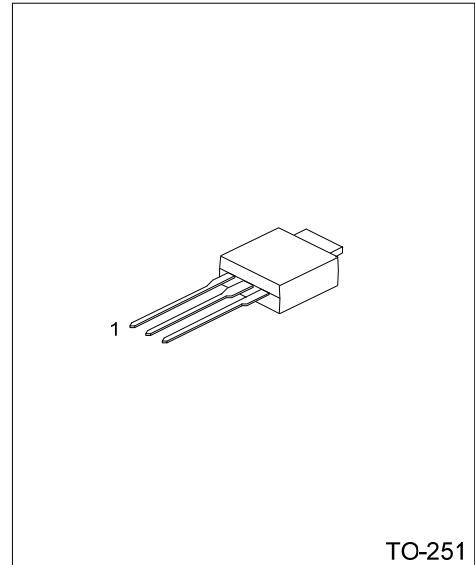
NPN TRIPLE DIFFUSED PLANAR TYPE HIGH VOLTAGE TRANSISTOR

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

ULB121G-TM3-T	(1) Packing Type (2) Package Type (3) Halogen Free	(1) T: Tube (2) TM3: TO-251 (3) G: Halogen Free
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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	I _C	300	mA
	Pulse		600	mA
Base Current	DC	I _B	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.

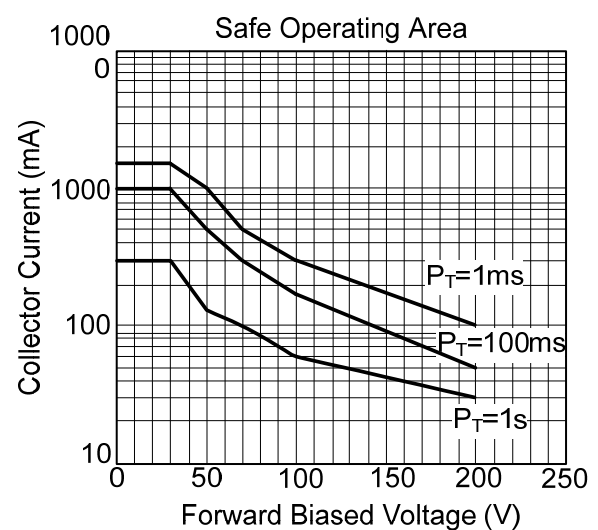
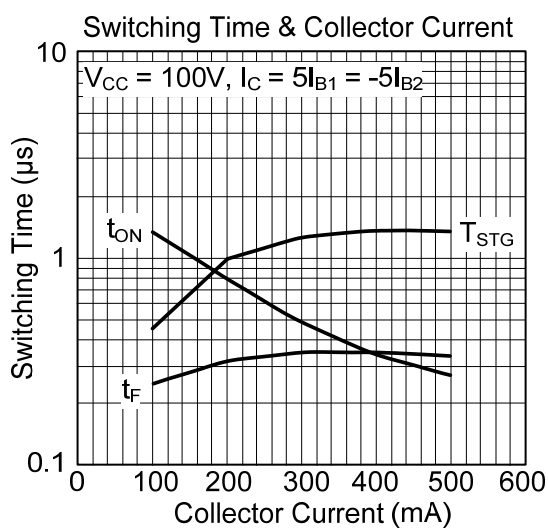
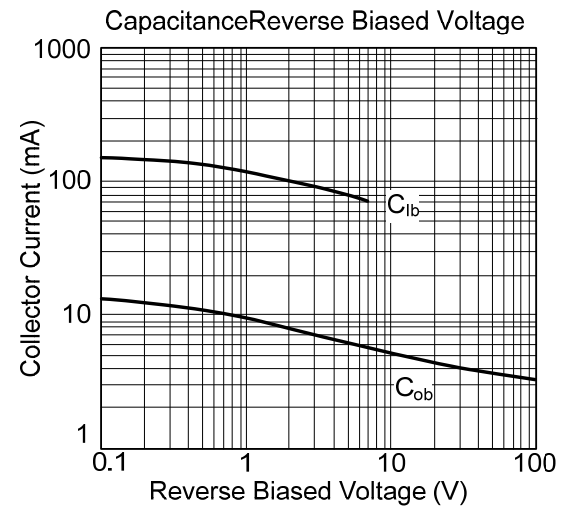
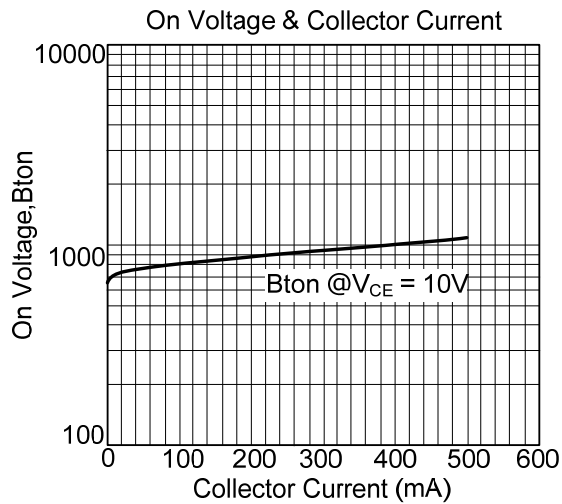
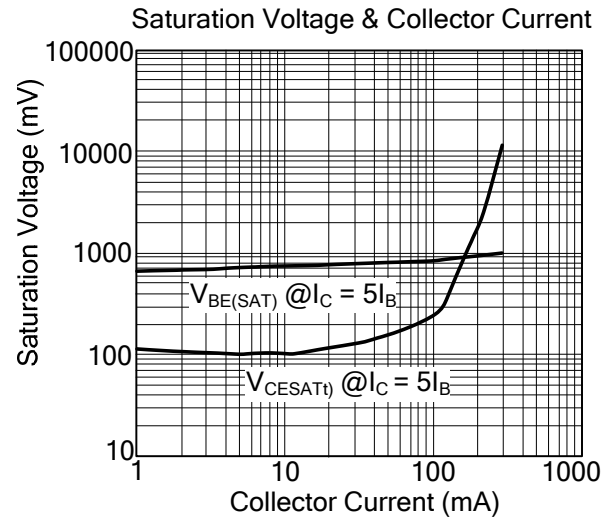
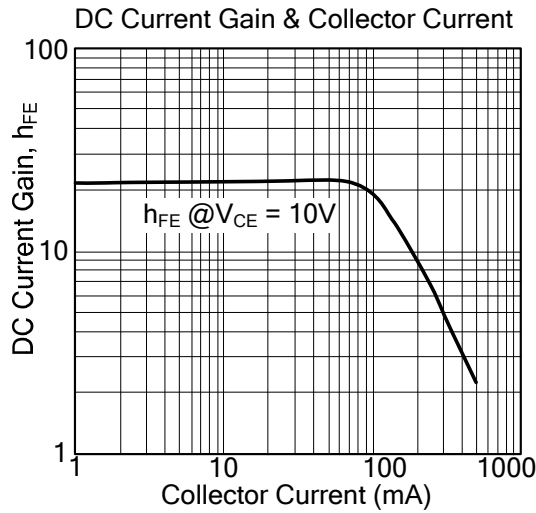
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ 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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