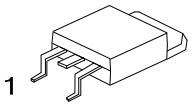
STD888 Preliminary ***PNP EPITAXIAL SILICON TRANSISTOR***

HIGH CURRENT, HIGH PERFORMANCE, LOW VOLTAGE PNP TRANSISTOR



TO-252

■ DESCRIPTION

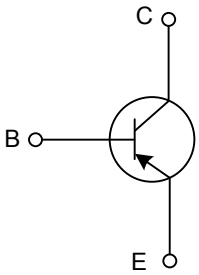
The UTC **STD888** is a high current, high performance, low voltage PNP transistor; it uses UTC's advanced technology to provide customers high DC current gain and very low saturation voltage.

The UTC **STD888** is suitable for switching regulator in battery charger applications, heavy load driver and voltage regulation in bias supply circuits, etc.

■ FEATURES

* Very low collector to emitter saturation voltage
* High DC current gain

■ EQUIVALENT CIRCUIT



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
STD888L-TN3-T	STD888G-TN3-T	TO-252	B	C	E	Tube
STD888L-TN3-R	STD888G-TN3-R	TO-252	B	C	E	Tape Reel

STD888L-TN3-T
(1)Packing Type
(2)Package Type
(3)Halogen Free

(1) T: Tube, R: Tape Reel
(2) TN3: TO-252
(3) L: Lead Free, G: Halogen Free

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■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage (I_E=0)	V_{CBO}	-60	V
Collector-Emitter Voltage (I_B=0)	V_{CEO}	-30	V
Emitter-Base Voltage (I_C=0)	V_{EBO}	-6	V
Collector Current	I_C	-5	A
Collector Peak Current (t_p<5ms)	I_{CM}	-10	A
Total Dissipation at T_C=25°C	P_D	15	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-65~+150	°C

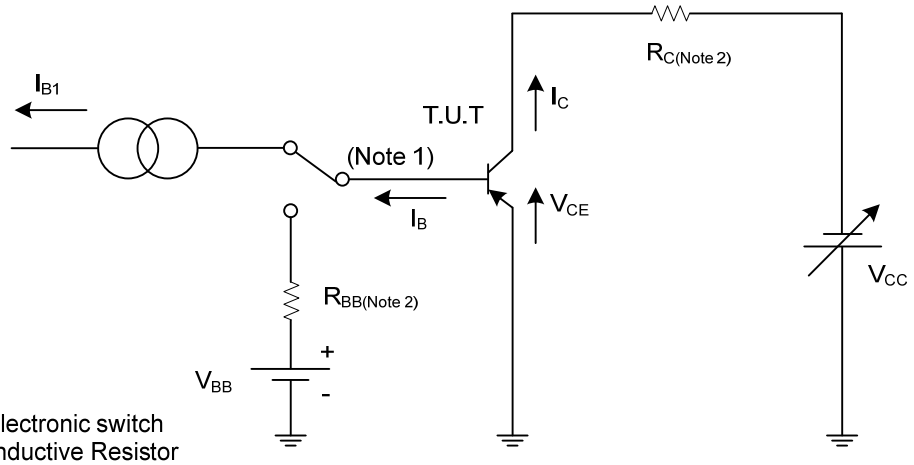
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_{CASE}=25°C unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	I_E=0, I_C=-100μA	-60			V
Collector-Emitter Breakdown Voltage	BV_{CEO} (Note 1)	I_B=0, I_C=-10mA	-30			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_C=0, I_E=-100μA	-6			V
Collector Cut-off Current	I_{CBO}	V_{CB}=-30V, I_E=0			-10	nA
Emitter Cut-off Current	I_{EBO}	I_C=0, V_{EB}=-6V			-10	nA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$ (Note 1)	I_C=-500mA, I_B=-5mA			-0.15	V
		I_C=-2A, I_B=-50mA			-0.25	V
		I_C=-5A, I_B=-250mA			-0.70	V
		I_C=-6A, I_B=-250mA			-0.70	V
		I_C=-8A, I_B=-400mA			-1	V
		I_C=-10A, I_B=-500mA			-1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$ (Note 1)	I_C=-2A, I_B=-50mA			-1.1	V
		I_C=-6A, I_B=-250mA			-1.4	V
DC Current Gain	h_{FE} (Note 1)	I_C=-10mA, V_{CE}=-1V	150	200		
		I_C=-500mA, V_{CE}=-1V	150	200	300	
		I_C=-5A, V_{CE}=-1V	75	100		
		I_C=-8A, V_{CE}=-1V	40	55		
		I_C=-10A, V_{CE}=-1V	15	35		
Delay Time	t_D	I_C=-3A, I_{B1}=-I_{B2}=-60mA, V_{CC}=-20V		180	220	ns
Rise Time	t_R			160	210	ns
Storage Time	t_S			250	300	ns
Fall Time	t_F			80	100	ns

Note: 1. Pulsed: Pulse duration=300μs, duty cycle≤1.5%

■ RESISTIVE LOAD SWITCHING TEST CIRCUIT



Notes 1. Fast electronic switch
2. Non-inductive Resistor

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