



UN2488

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

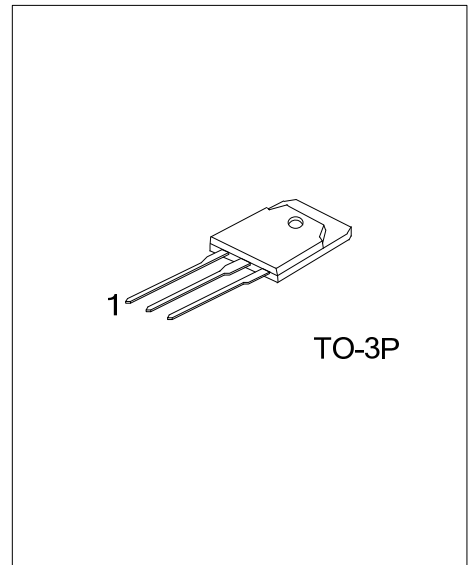
NPN SILICON POWER TRANSISTOR

DESCRIPTION

The UTC **UN2488** is an NPN epitaxial transistor, it uses UTC's advanced technology to provide the customers with high collector-emitter breakdown voltage and ultra-high DC current gain, etc.

FEATURES

- * High collector-emitter breakdown voltage
- * Ultra-high DC current gain



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UN2488L-x-T3P-T	UN2488G-x-T3P-T	TO-3P	B	C	E	Tube

Note: Pin Assignment: A: Anode, K: Cathode

<p>UN2488L-x-T3P-T</p> <ul style="list-style-type: none">(1) Packing Type(2) Package Type(3) Rank(4) Lead Free	<ul style="list-style-type: none">(1) T: Tube(2) T3P: TO-3P(3) x: refer to Classification of h_{FE}(4) L: Lead Free, G: Halogen Free
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MARKING INFORMATION

PACKAGE MARKING	
TO-3P	<div><div>UTC UN2488</div><div>Lot Code</div><div>1</div><div>L: Lead Free G: Halogen Free Data Code</div></div>

■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	10	A
Base Current	I_B	1	A
Collector Power Dissipation ($T_C=25^\circ\text{C}$)	P_C	150	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

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 ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO} V	$V_{CB}=160\text{V}$, $I_E=0\text{A}$			100	μA
Emitter Cut-Off Current	I_{EBO} V	$V_{EB}=5\text{V}$, $I_C=0\text{A}$			100	μA
Collector-Emitter Voltage	V_{CEO} I	$I_C=30\text{mA}$ 150				V
DC Current Gain	h_{FE}	$V_{CE}=4\text{V}$, $I_C=7\text{A}$ 500	0		30000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$ I	$I_C=7\text{A}$, $I_B=7\text{mA}$			2.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$ I	$I_C=7\text{A}$, $I_B=7\text{mA}$			3.0	V
Current Gain Bandwidth Product	f_T V	$V_{CE}=12\text{V}$, $I_E=2\text{A}$	5	5		MHz
Output Capacitance	C_{ob} V	$V_{CB}=10\text{V}$, $f=1\text{MHz}$, $I_E=0\text{A}$	95			pF

■ CLASSIFICATION OF h_{FE}

RANK	O	P	Y
RANGE	5000 ~ 12000	6500 ~ 20000	15000 ~ 30000

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