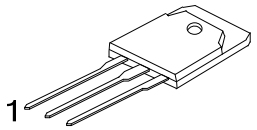
UN2488 **Preliminary** ***NPN EPITAXIAL SILICON TRANSISTOR***

NPN SLICON POWER TRANSISTOR



TO-3P

■ 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

UN2488L-x-T3P-T
(1)Packing Type
(2)Package Type
(3)Rank
(4)Lead Free

(1) T: Tube
(2) T3P: TO-3P
(3) x: refer to Classification of h_{FE}
(4) L: Lead Free, G: Halogen Free

■ MARKING INFORMATION

PACKAGE	MARKING
TO-3P	UTC UN2488□ □□□□□□ Lot Code Data Code 1 L: Lead Free G: Halogen Free

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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°C)	P_C	150	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~+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
Collector Cut-Off Current	I_{CBO}	V_{CB}=160V, I_E=0A			100	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5V, I_C=0A			100	μA
Collector-Emitter Voltage	V_{CEO}	I_C=30mA	150			V
DC Current Gain	h_{FE}	V_{CE}=4V, I_C=7A	5000		30000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=7A, I_B=7mA			2.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=7A, I_B=7mA			3.0	V
Current Gain Bandwidth Product	f_T	V_{CE}=12V, I_E=2A		55		MHz
Output Capacitance	C_{ob}	V_{CB}=10V, f=1MHz, I_E=0A		95		pF

■ CLASSIFICATION OF h_{FE}

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