

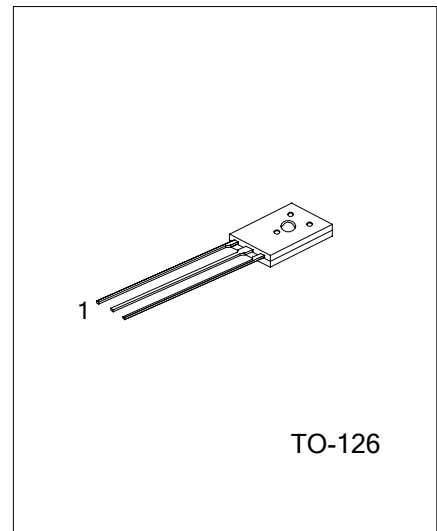
HIGH FREQUENCY SWITCHING TRANSISTORS FOR BALLASTERS

DESCRIPTION

UTC 4128 is designed for specially used for electronic ballasters in 110VAC environment.

FEATURES

- * Triple diffused technology.
- * High switching speed



TO-126

1: BASE 2: COLLECTOR 3: EMITTER
*Pb-free plating product number: 4128L

ABSOLUTE MAXIMUM RATINGS

(T_c = 25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CBO}	400	V
Collector-Emitter Voltage	V _{CEO}	200	V
Collector-Emitter Voltage	V _{EBO}	7	V
Peak Collector Current	I _C	5	A
Peak Collector Consume Dissipation	P _C	40	W
Peak Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-40 ~ +150	°C

ELECTRICAL CHARACTERISTICS

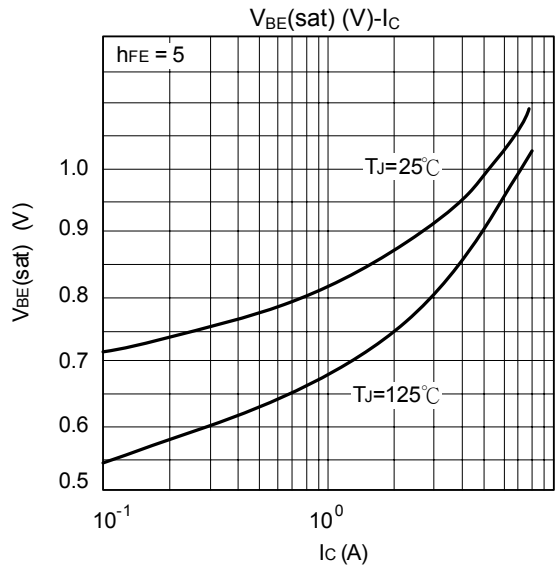
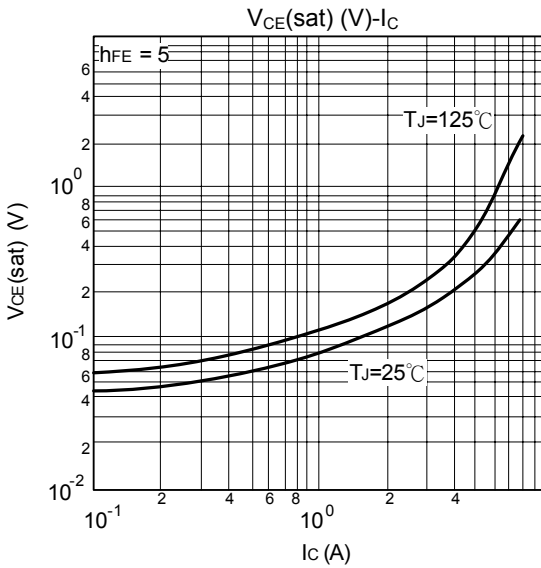
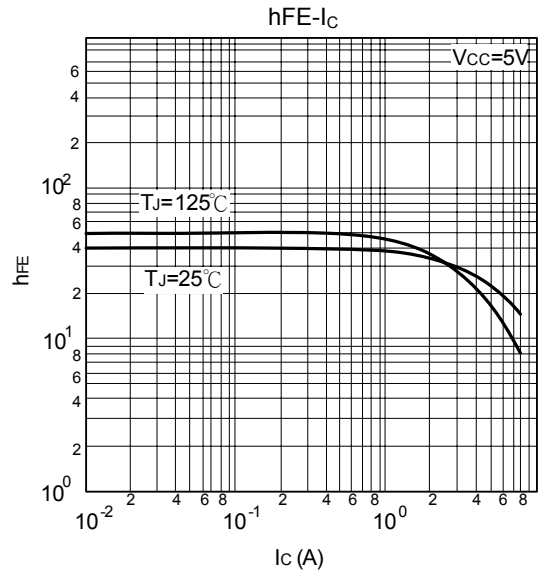
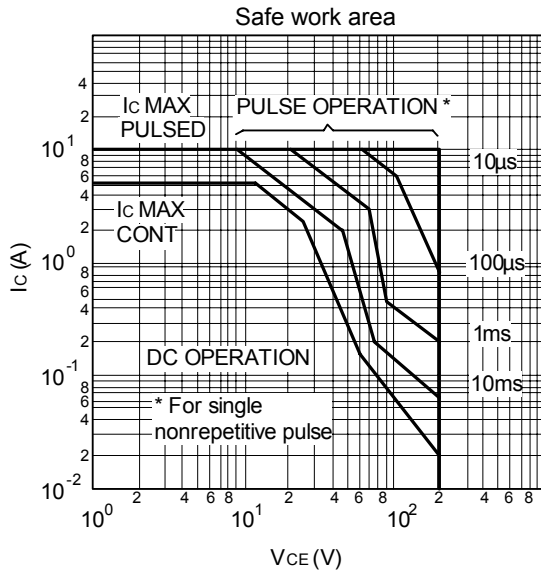
(T_a = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Maintenance Voltage	V _{CEO(SUS)}	I _C =10mA, I _B =0	200			V
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _C =1mA, I _B =0	400			V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E =1mA, I _C =0	7			V
Collector-Base Cutoff Current	I _{CBO}	V _{CB} =400V, I _E =0			100	μA
Collector-Emitter Cutoff Current	I _{CEO}	V _{CE} =200V, I _B =0			100	μA
Emitter-Base Cutoff Current	I _{EBO}	V _{EB} =7V, I _C =0			100	μA
DC Current Gain	h _{FE(1)}	V _{CE} =10V, I _C =0.5A	10		60	
	h _{FE(2)}	V _{CE} =5V, I _C =2A	10		40	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =1A, I _B =0.2A			0.8	V
		I _C =4A, I _B =1A			2	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =2A, I _B =0.5A			1.6	V
Fall Time	t _f	I _C =2A, I _{B1} =-I _{B2} =0.4A			0.9	μs
Storage Time	t _s	I _C =2A, I _{B1} =-I _{B2} =0.4A			4	μs
Feature Frequency	f _T	V _{CE} =10V, I _C =0.5A	4			MHz

UTC UNISONIC TECHNOLOGIES CO., LTD.

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CHARACTERISTIC CURVES



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