

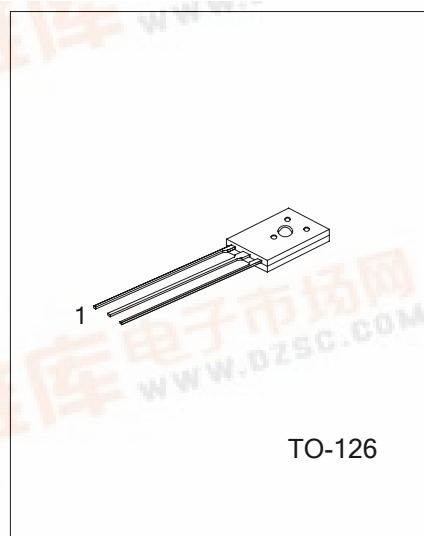
HIGH FREQUENCY SWITCHING TRANSISTORS FOR BALLASTERS

DESCRIPTION

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

FEATURES

- * Triple diffused technology.
- * High switching speed



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

ABSOLUTE MAXIMUM RATINGS

(Tc = 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

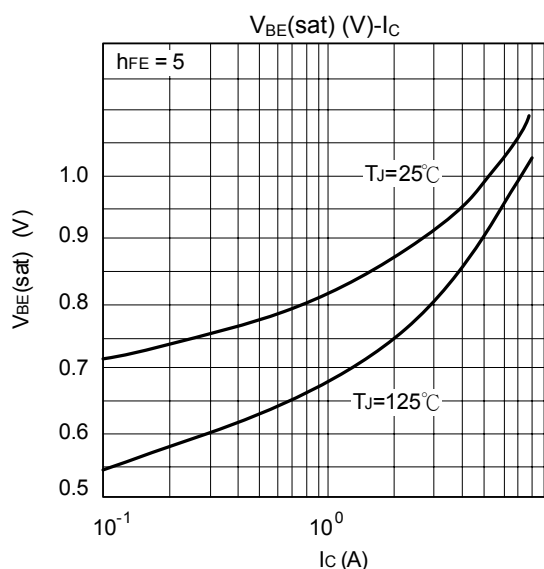
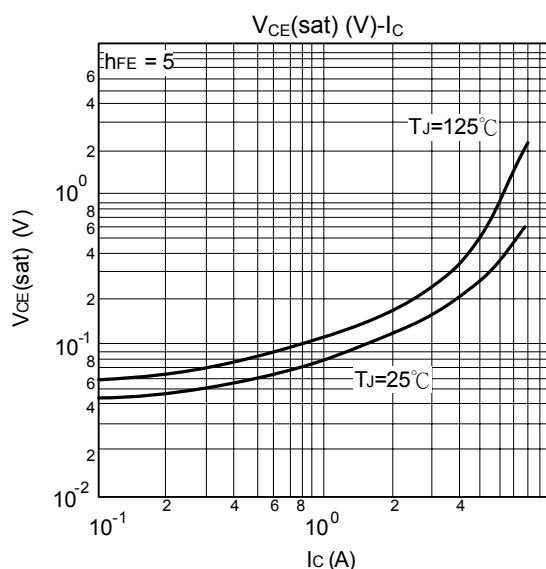
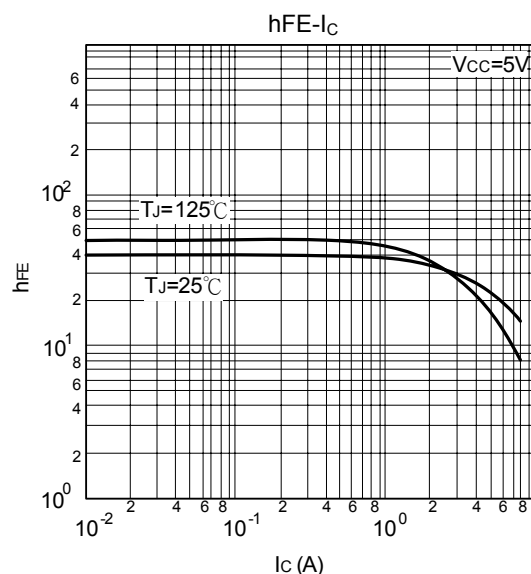
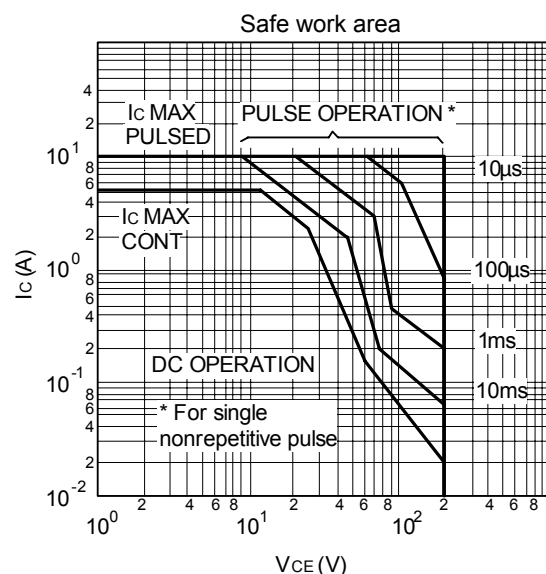
(Ta = 25°C)

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.



CHARACTERISTICS CURVES



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