



4126

NPN EPITAXIAL SILICON TRANSISTOR

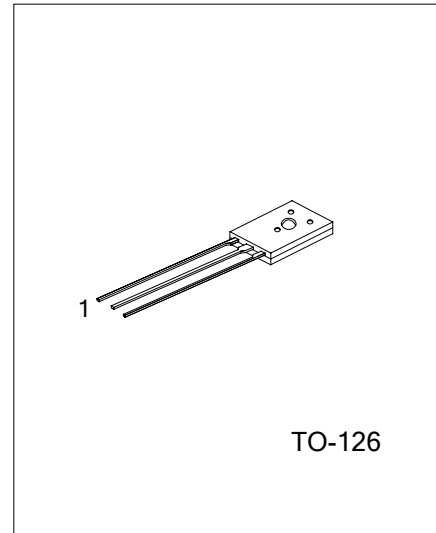
HIGH FREQUENCY SWITCHING TRANSISTORS FOR BALLASTERS

■ DESCRIPTION

UTC 4126 is designed for specially used for electronic ballasters in 110VAC environment.

■ FEATURES

- * Triple diffused technology.
- * High switching speed



*Pb-free plating product number: 4126L

■ PIN CONFIGURATION

PIN NO.	PIN NAME
1	Base
2	Collector
3	Emitter

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead free		
4126-T60-T	4126L-T60-T	TO-126	Tube

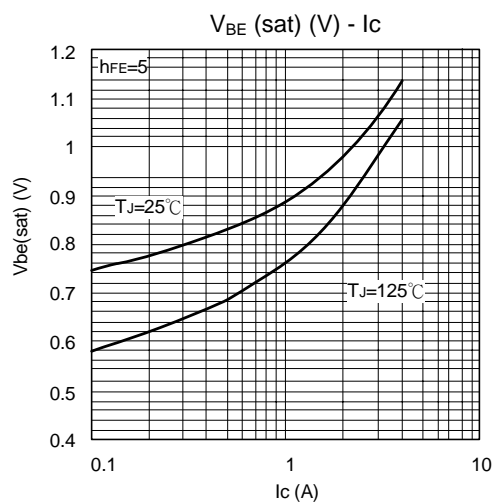
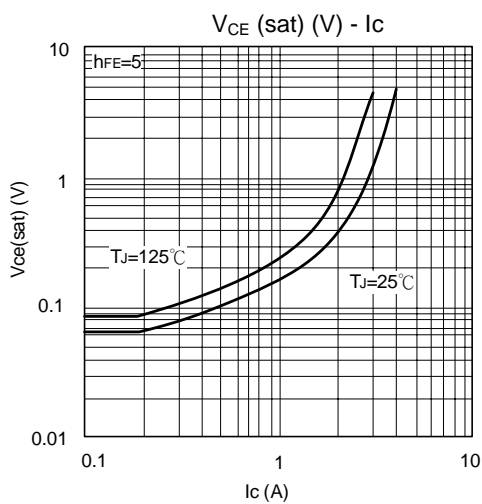
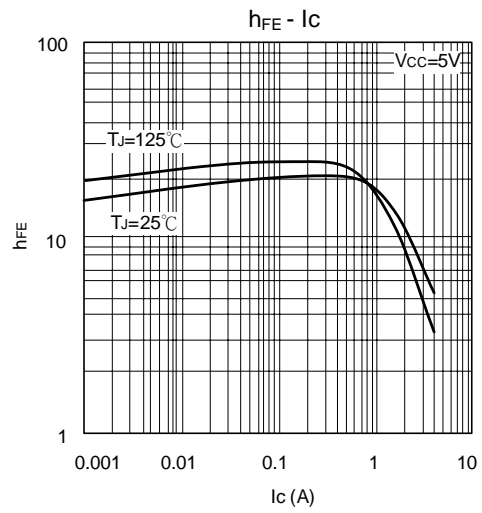
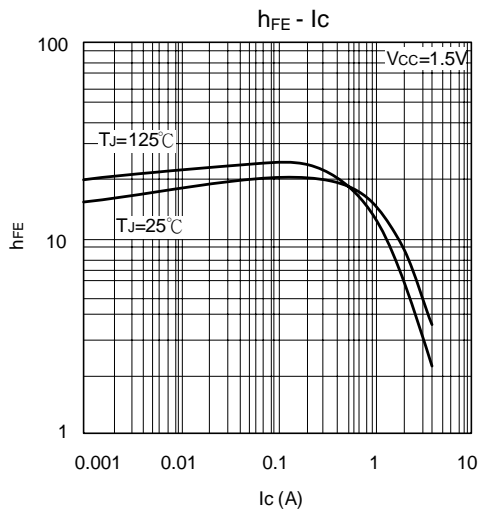
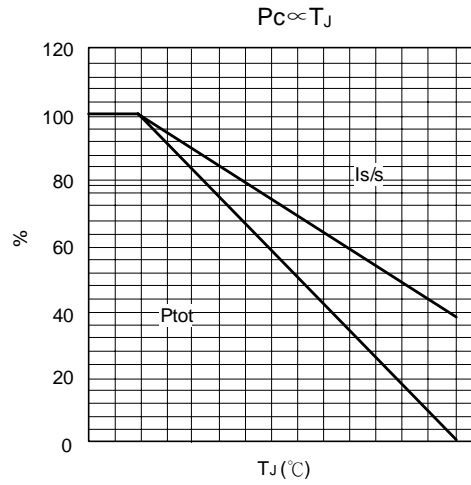
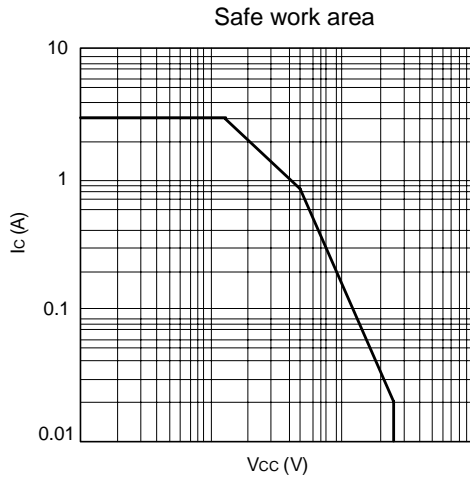
■ ABSOLUTE MAXIMUM RATINGS ($T_c = 25^\circ\text{C}$)

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	3	A
Peak Collector Consume Dissipation	P_D	40	W
Peak Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

■ ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Maintenance Voltage	$V_{CEO(SUS)}$	$I_C = 10\text{mA}, I_B = 0$	200			V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 1\text{mA}, I_B = 0$	400			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 1\text{mA}, I_C = 0$	7			V
Collector-Base Cutoff Current	I_{CBO}	$V_{CB} = 400\text{V}, I_E = 0$			100	μA
Collector-Emitter Cutoff Current	I_{CEO}	$V_{CE} = 200\text{V}, I_B = 0$			100	μA
Emitter-Base Cutoff Current	I_{EBO}	$V_{EB} = 7\text{V}, I_C = 0$			100	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 10\text{V}, I_C = 0.5\text{A}$	10		60	
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 3\text{A}$	5		40	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 0.5\text{A}, I_B = 0.1\text{A}$			0.5	V
		$I_C = 2\text{A}, I_B = 0.5\text{A}$			1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 1\text{A}, I_B = 0.25\text{A}$			1.2	V
Fall Time	t_f	$I_C = 1\text{A}, I_{B1} = -I_{B2} = 0.2\text{A}$			0.7	μs
Storage Time	t_s	$I_C = 1\text{A}, I_{B1} = -I_{B2} = 0.2\text{A}$			4	μs
Feature Frequency	f_T	$V_{CE} = 10\text{V}, I_C = 0.1\text{A}$	4			MHz

■ TYPICAL CHARACTERISTICS



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