



# 4126

## NPN EPITAXIAL SILICON TRANSISTOR

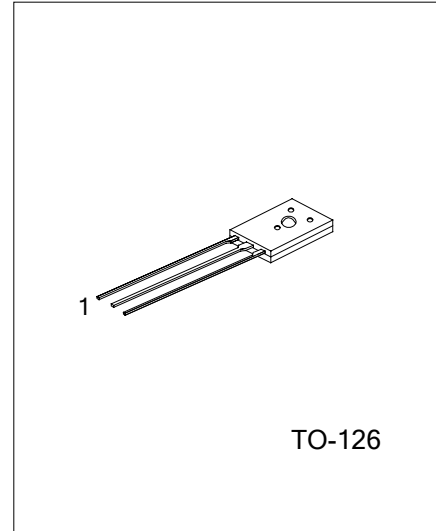
### HIGH FREQUENCY SWITCHING TRANSISTORS FOR BALLASTERS

■ 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

[www.DataSheet4U.com](http://www.DataSheet4U.com)

■ ORDERING INFORMATION

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

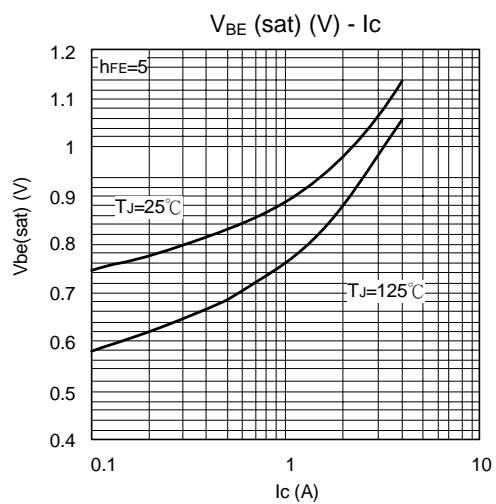
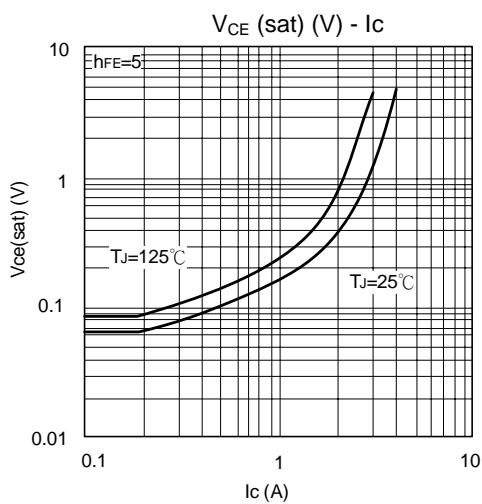
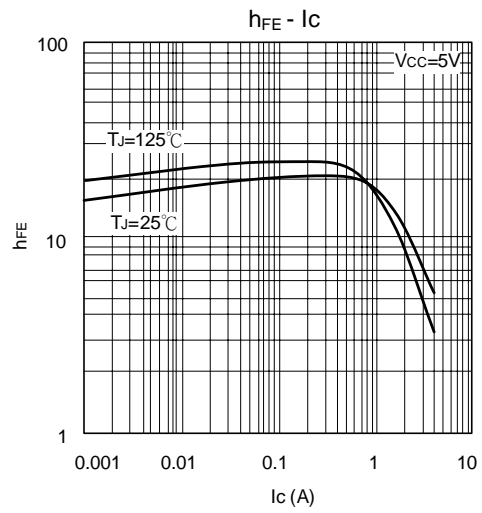
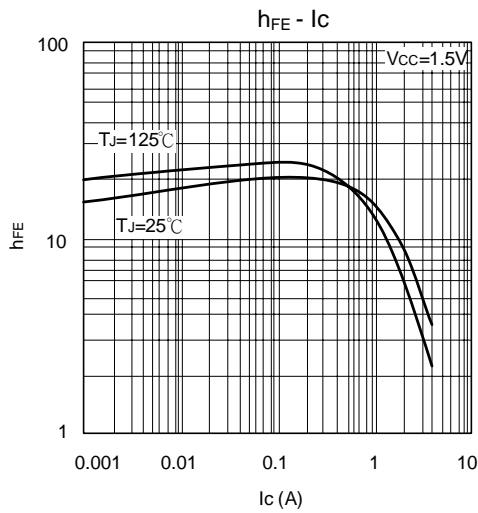
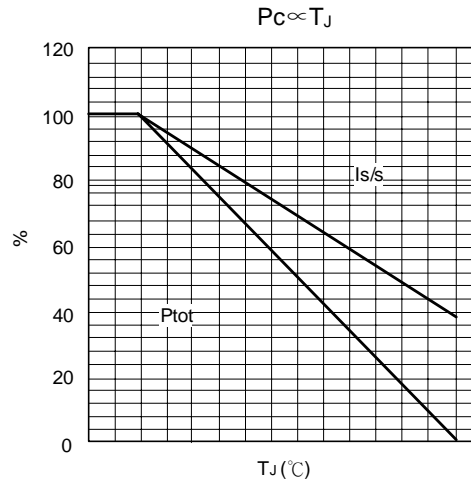
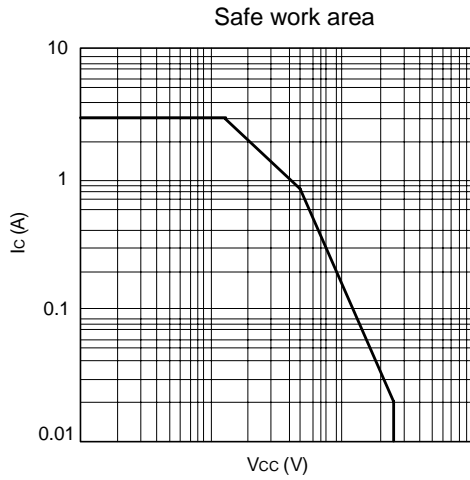
■ ABSOLUTE MAXIMUM RATINGS ( $T_c = 25^\circ\text{C}$ )

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	$\mu\text{A}$
Collector-Emitter Cutoff Current	$I_{CEO}$	$V_{CE} = 200\text{V}, I_B = 0$			100	$\mu\text{A}$
Emitter-Base Cutoff Current	$I_{EBO}$	$V_{EB} = 7\text{V}, I_C = 0$			100	$\mu\text{A}$
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	$\mu\text{s}$
Storage Time	$t_s$	$I_C = 1\text{A}, I_{B1} = -I_{B2} = 0.2\text{A}$			4	$\mu\text{s}$
Feature Frequency	$f_T$	$V_{CE} = 10\text{V}, I_C = 0.1\text{A}$	4			MHz

■ TYPICAL CHARACTERISTICS



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