4126 **NPN EPITAXIAL SILICON TRANSISTOR**

HIGH FREQUENCY SWITCHING TRANSISTORS FOR BALLASTERS

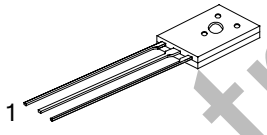
.

■ DESCRIPTION

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

■ FEATURES

* Triple diffused technology.
* High switching speed



TO-126

*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

www.signal.com.tr

Copyright © 2005 Unisonic Technologies Co.,LTD

■ ABSOLUATE MAXIUM RATINGS (Tc = 25℃)

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	℃
Storage Temperature	T_{STG}	-40 ~ +150	℃

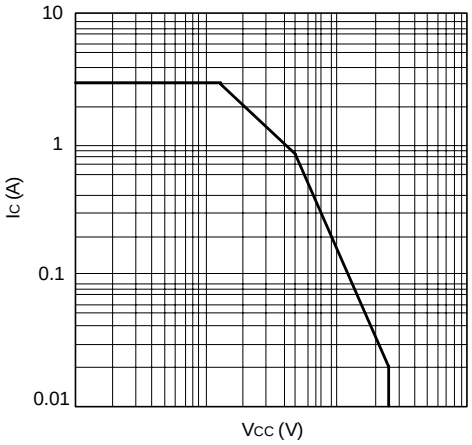
■ ELECTRICAL CHARACTERISTICS (Ta= 25℃, unless otherwise specified)

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, Ic=0			100	μA
DC Current Gain	$h_{FE\ (1)}$	V_{CE}=10V, Ic=0.5A	10		60	
	$h_{FE\ (2)}$	V_{CE}=5V, Ic=3A	5		40	
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C=0.5A, I_B=0.1A			0.5	V
		I_C=2A, I_B=0.5A			1.5	V
Base-Emitter Saturation Voltage	$V_{BE\ (sat)}$	I_C=1A, I_B=0.25A			1.2	V
Fall Time	tf	I_C=1A, I_{B1}= -I_{B2} = 0.2A			0.7	μs
Storage Time	ts	I_C=1A, I_{B1}= -I_{B2} = 0.2A			4	μs
Feature Frequency	f_T	V_{CE}=10V, Ic=0.1A	4			MHz

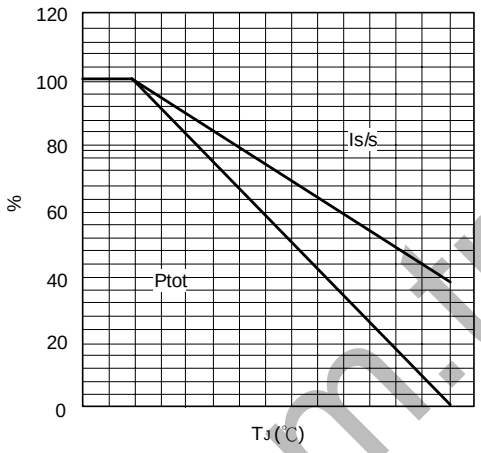
www.signal.com.tr

■ TYPICAL CHARACTERICS

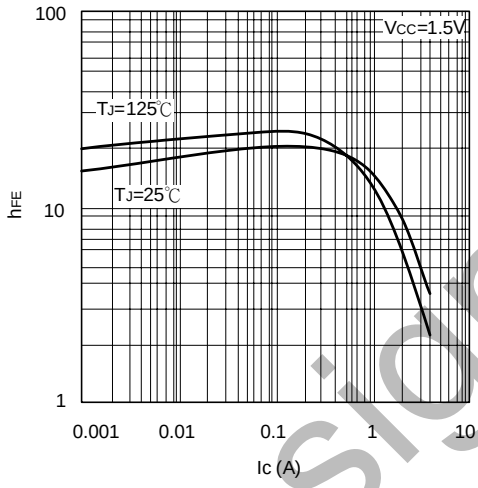
Safe work area



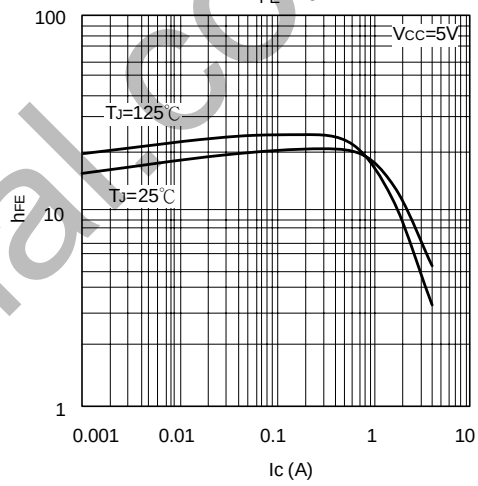
$P_C \propto T_J$



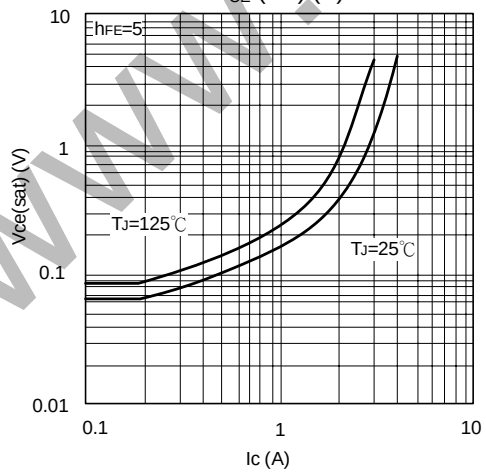
h_{FE} - Ic



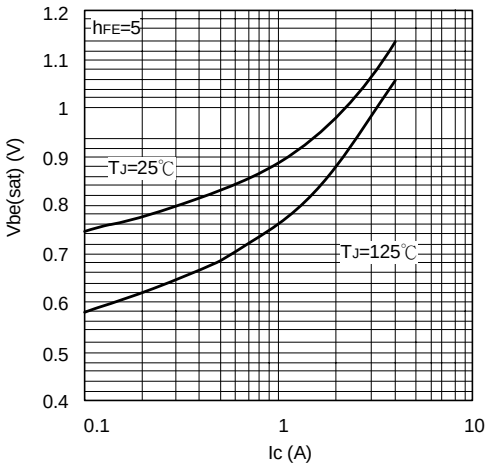
h_{FE} - Ic



V_{CE} (sat) (V) - Ic



V_{BE} (sat) (V) - Ic



www.signal.com.tr

www.signal.com.tr

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.