UNISONIC TECHNOLOGIES CO., LTD

4126D

NPN EPITAXIAL SILICON TRANSISTOR

MIDDLING VOLTAGE FAST-SWITCHING NPN POWER TRANSISTOR

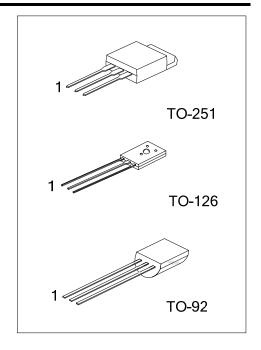
DESCRIPTION

The UTC 4126D is a middling voltage NPN power transistor. it uses UTC's advanced technology to provide customers with high switching speed and high reliability, etc.

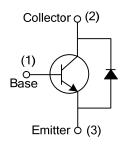
The UTC 4126D is suitable for commonly power amplifier circuit, electronic ballasts and energy-saving light etc.

FEATURES

- * High switching speed
- * High reliability



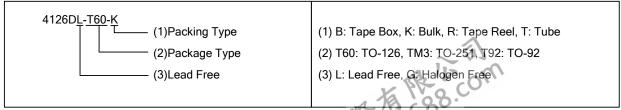
SYMBOL



ORDERING INFORMATION

Ordering Number		Dookogo	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
4126DL-T92-B	4126DG-T92-B	TO-92	В	С	Е	Tape Box	
4126DL-T92-K	4126DG-T92-K	TO-92	В	С	Е	Bulk	
4126DL-T92-R	4126DG-T92-R	TO-92	В	С	Е	Tape Reel	
4126DL-T60-K	4126DG-T60-K	TO-126	В	C	E	Bulk	
4126DL-TM3-T	4126DG-TM3-T	TO-251	В	С	E	Tube	

Note: Pin Assignment: B: Base C: Collector E: Emitter



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ABSOLUTE MAXIMUM RATINGS (T_C=25°C)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Emitter Voltage (V _{BE} =0)		V _{CES}	350	V
Collector-Emitter Voltage (I _B =0)		V_{CEO}	200	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	Ic	3	Α
	Pulse (Note 2)	I _{CP}	6	Α
Base Current	DC	I _B	1	Α
	Pulse (Note 2)	I _{BP}	2	Α
Total Dissipation	TO-92	Б	1.5	W
	TO-126/TO-251	Pc	40	W
Junction Temperature		TJ	150	°C
Storage Temperature Range		T _{STG}	-55~+150	°C

Notes: 1. Absolute maximum ratings are stress ratings only and functional device operation is not implied. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

THERMAL CHARACTERISTICS

PARAMETER		SYMBOL	RATINGS	UNIT	
Junction to Case	TO-92	0	80	°C/W	
	TO-126/TO-251	$\theta_{ m JC}$	3.125	°C/W	

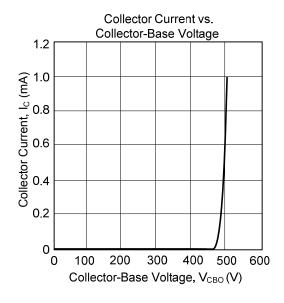
ELECTRICAL CHARACTERISTICS

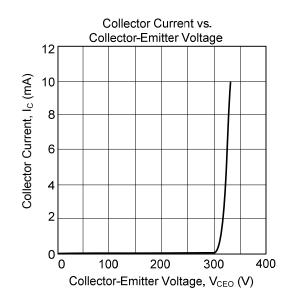
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_CBO	I _C =1mA, I _B =0	350			V
Collector-Emitter Breakdown Voltage	BV_CEO	I _C =10mA, I _B =0				V
Emitter-Base Breakdown Voltage	BV_{EBO}	I _E =1mA, I _C =0				V
Collector Cut-Off Current	I _{CBO}	V _{CB} =350V, I _E =0			100	μΑ
Collector-Emitter Cut-Off Current	I_{CEO}	V _{CE} =200V, I _B =0			50	μΑ
Emitter Cut-Off Current	I _{EBO}	V_{EB} =7V, I_C =0			10	μΑ
0.11	$V_{CE(SAT)1}$	I _C =1A, I _B =0.2A			0.8	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)2}$	I _C =3A, I _B =0.6A			1.6	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	I _C =2A, I _B =0.5A			1.5	V
DC 0	h _{FE1}	I_C =0.5A, V_{CE} =5V	8		50	
DC Current Gain	h _{FE2}	$I_C=2A,V_{CE}=5V$	7			
Transition Frequency	f_T	I _C =0.5A, V _{CE} =10V	4			MHz
Storage Time	ts	t _S			4	μs
Fall Time	t _F	V_{CC} =24V, I_C =0.5A, I_{B1} =- I_{B2} =0.1A			0.7	μs

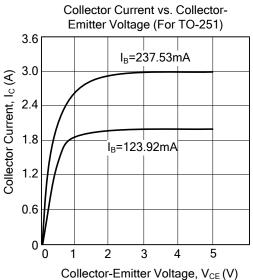


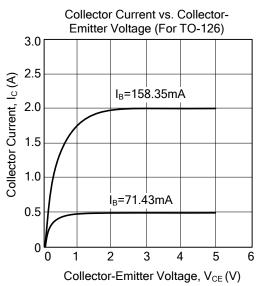
^{2.} Pulse Test: Pulse Width=5.0ms, Duty Cycle<10%.

■ TYPICAL CHARACTERISTICS









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