

CXA-0461

Features

- 1 output
 - Usable in a wide range of temperatures
 - Applicable panel size*: 3 to 15 inches
 - With brightness control function (Pulse Width Modulation Dimming).
 - With shut down function.
 - With a sensing function for running out of lamp (alarm output).
 - In the high-voltage generator (a terminal and a pattern), an anti-dust measure by silicone application is taken.
- (Notice) Applicable panel size becomes a standard.

Applications



CXA-0461 Specifications (Please refer to each specification before use)

Electrical Characteristics

Item	Unit	Symbol	Specification			Condition						Remarks
			min	typ	max	Vin(V)	Vrmt(V)	Vbr(V)	Rbr(kΩ)	Ta(°C)	RL(kΩ)	
Output Current	mA	Iout (Maximum dimmer)	4.5	5	5.5	12±1.2	5	0	-	-10 to 70	133	Voltage dimmer (*1)
			4.5	5	5.5	12±1.2	5	-	0	-10 to 70	133	Volume dimmer (*1)
		Iout (Minimum dimmer)	1.7	2.7	3.7	12±1.2	5	2.5	-	-10 to 70	133	Voltage dimmer (*1)
			1.7	2.7	3.7	12±1.2	5	-	50	-10 to 70	133	Volume dimmer (*1)
Input Current	mA	Iin1	-	420	750	12±1.2	5	0	-	-10 to 70	133	Remote ON
	mA	Iin2	-	-	1	12±1.2	0	0	-	-10 to 70	133	Remote OFF
Oscillatory Frequency	kHz	Freq1	40	45	50	12±1.2	5	0	-	-10 to 70	133	
	Hz	Freq2 (Duty frequency)	229	255	281	12±1.2	5	2.5	-	-10 to 70	133	
Open Circuit Voltage	Vrms	Vopen	1600	1800	2000	12±1.2	5	0	-	-10 to 70	∞	Open load
Alarm Signal	V	Vst	4.5	5.1	5.5	12±1.2	5	0	-	-10 to 70	∞	In case of lamp anomaly (*2)
			-	0	0.5	12±1.2	5	0	-	-10 to 70	133	On a normal operation (*2)

(*1) Please refer to the connection diagram for details of a dimming method.

(*2) Please refer to the connection diagram for details of alarm output.

Other Specifications

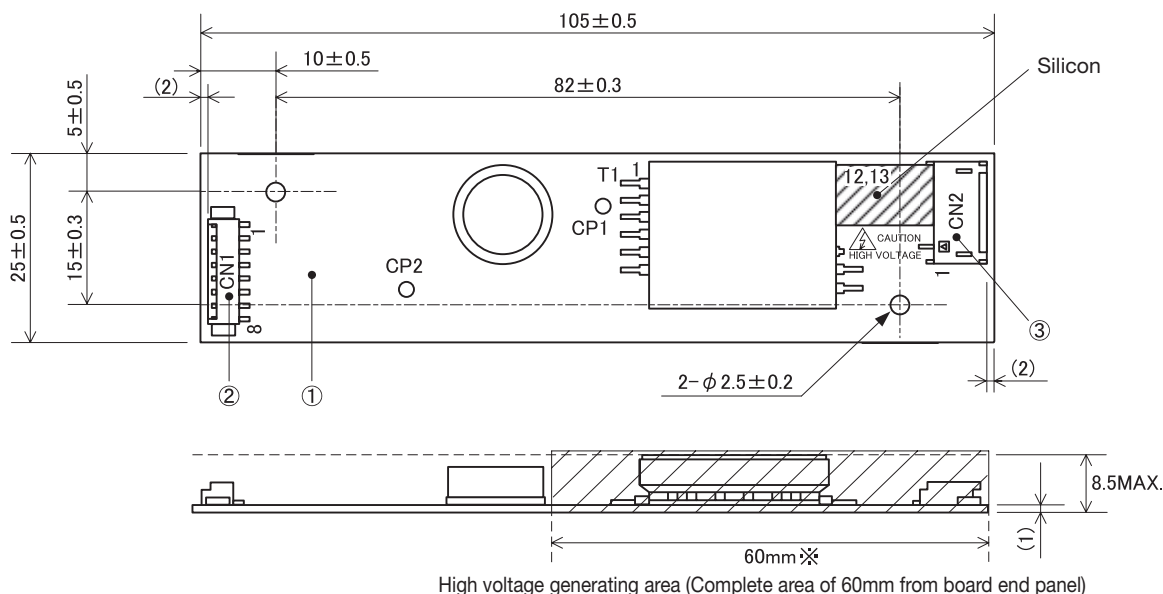
Dimming Function		Yes
Operating Temperature	°C	-10 to +70
Storage Temperature	°C	-30 to +85
Operating Humidity Ratio	RH%	95max.
Safety Standard		—
Weight	g	18typ.
Dimensions (WxDxH)	mm	105x25x8.5 (*3)
Fused Input		Yes
Remote ON / OFF		Yes
Alarm Signal Function		Yes
Shutdown Function		Yes
Silicone Coating on High Voltage Area		Yes

(*3) These dimensions are indicated the maximum only H. Others are typical values.

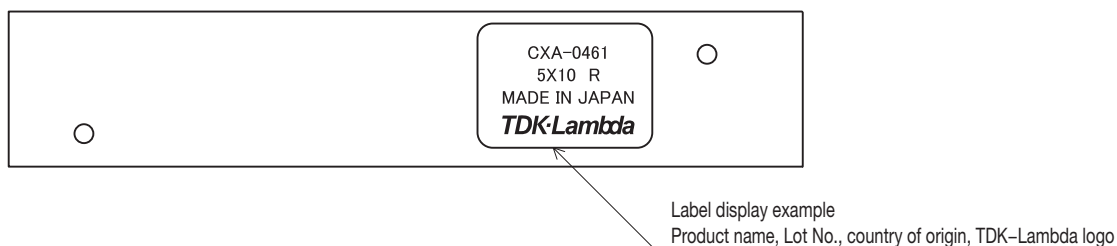
Conformity to RoHS Directive

This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

Outline Drawing



*From high-voltage generator, please secure space distance more than 3mm in top and bottom right and left.



Connector

No.	Component name	Type name	Qty	Remarks	Recommended suitable connector
①	Printed circuit board PCB	Composite (CEM-3)	1	UL94V-0 $t=1.0$	-
②	Input connector CN1	53261-0871	1	Molex	51021-0800
③	Output connector CN2	SM02(8.0)B-BHS-1(LF)(SN)	1	J.S.T Mfg., Co., Ltd	BHR-03VS-1

Terminal Number & Function

Input side CN1

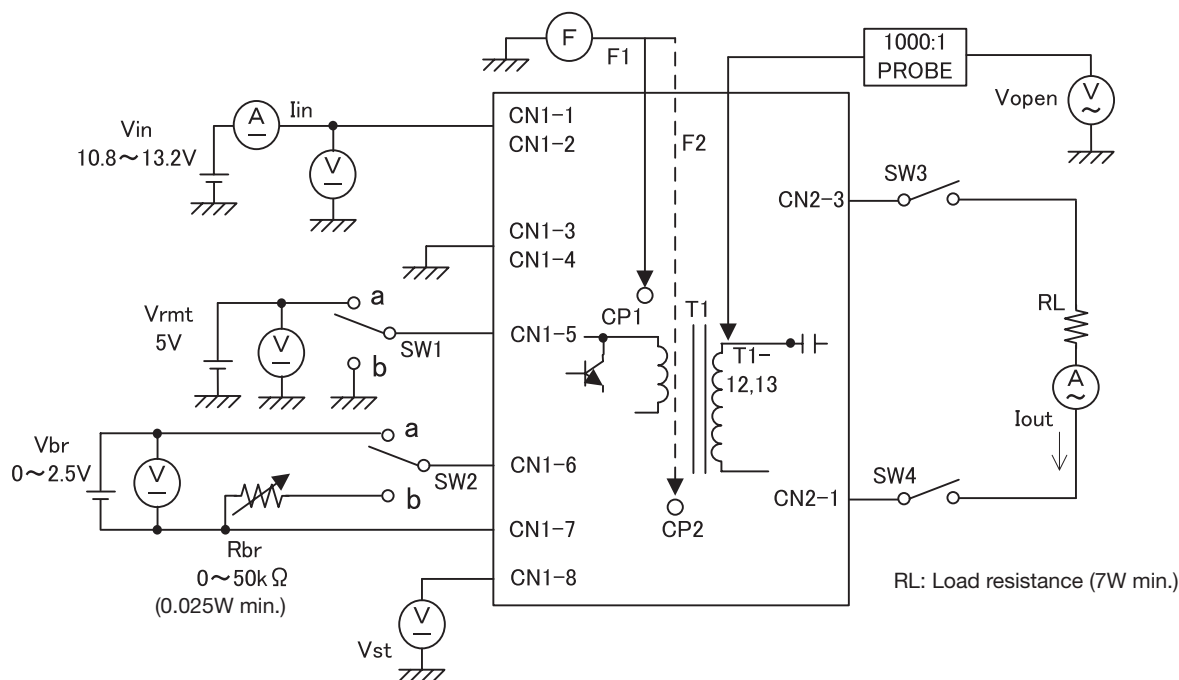
Terminal No.	Symbol	Rating	Remarks
CN1-1	Vin	$12 \pm 1.2V$	Power source input
CN1-2			
CN1-3	GND	0V	Ground
CN1-4			
CN1-5	Vrmt	0V/2.5V to Vin	Remote terminal 0 to 0.4V : OFF 2.5 to Vin : ON
CN1-6	Vbr1/Rbr1	0 to 2.5V/0 to 50k Ω	Dimmer terminal 1
CN1-7	Vbr2/Rbr2	GND/0 to 50k Ω	Dimmer terminal 2
CN1-8	Vst(output)	0V/5V	Alarm output Lamp open : 5V

Output side CN2

Terminal No.	Symbol	Rating	Remarks
CN2-1	V _{LOW}	(2V)	Output return
CN2-2	N.C.	—	N.C.
CN2-3	V _{HIGH}	600Vrms	Output

Connections

DC-AC Inverter



Connector type/1 output

Operate as follows by switching a SW1.

SW1	Unit operates
a	Operates
b	Does not operate
Open	Does not operate

Operate as follows by switching a SW2.

SW2	Unit operates
a	Voltage dimmer Vbr = 0 to 2.5V (0V: Maximum brightness)
b	Volume dimmer VR = 0 to 50kΩ (0Ω: Maximum brightness)

Protection Circuit Operation

Load condition	Alarm output (CN1-8)*1	Shutdown function*2
When normal	0.5V max.	Does not shut down
When 1 load (lamp) is open	4.5 to 5.5V	Shuts down

*1. When more than one of SW3, SW4 in the connection diagram was opened, output alarm signal of 5V.
*2. When all lamps were opened, this inverter has included protective function to stop operation in about 3 seconds.