CXA-0496

Dimming/Connector Type

■ Features

- ●2 outputs
- ●Usable in a wide range of temperatures
- ●UL60950-1 acquisition product
- ●Applicable panel size*: 8 to 10 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-0496 Specifications (Please refer to each specification before use)

Electrical Characteristics

Item	Unit	Symbol	Specification			Condition							
			min	typ	max	Vin(V)	Vrmt(V)	Vbr(V)	Rbr(kΩ)	Ta(℃)	RL1,2(kΩ)	CL1,2(PF)(*3)	Remarks
Output Current	mArms	Iout 1, 2 (Maximum dimmer)	5.3	6.0	6.7	12±1.2	5	0	-	-30 to +80	72	3	Voltage dimmer (*1)
			5.3	6.0	6.7	12±1.2	5	-	0	-30 to +80	72	3	Volume dimmer (*1)
		Iout 1, 2 (Minimum dimmer)	3.6	4.3	5.0	12±1.2	5	2.5	-	-30 to +80	72	3	Voltage dimmer (*1)
			3.6	4.3	5.0	12±1.2	5	-	50	-30 to +80	72	3	Volume dimmer (*1)
Input Current	mA	Iin1	-	600	1300	12±1.2	5	0	-	-30 to +80	72	3	Remote ON
	mA	Iin2	-	-	1	12±1.2	0	0	-	-30 to +80	72	3	Remote OFF
Oscillatory Frequency	kHz	Freq1	45	50	55	12±1.2	5	0	-	-30 to +80	72	3	
	Hz	Freq2 (Duty frequency)	225	250	275	12±1.2	5	2.5	-	-30 to +80	72	3	
Open Circuit Voltage	Vrms	Vopen1,2	1400	1550	-	12±1.2	5	0	-	-30 to +80	∞/∞	∞/∞	Open load
Alarm Signal	V	Vst	4.5	5.1	5.5	12±1.2	5	0	-	-30 to +80	∞/72	∞/3	In case of lamp anomaly (*2)
			4.5	5.1	5.5	12±1.2	5	0	-	-30 to +80	72/∞	3/∞	In case of lamp anomaly (*2)
			-	0	0.5	12±1.2	5	0	-	-30 to +80	72	3	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.

(*3) As equivalent circuit of panel load, connect resistance load (RL) and distributed capacity (CL), and have provided by an electrical characteristic.

Other Specifications

Dimming Function		Yes
Operating Temperature	℃	-30 to +80
Storage Temperature	℃	-30 to +85
Operating Humidity Ratio	RH%	95max.
Safety Standard		UL60950-1
Weight	g	22typ.
Dimensions (WxDxH)	mm	110x22x8.5 (*3)
Fused Input		Yes
Remote ON / OFF		Yes
Alarm Signal Function		Yes
Shutdown Function		Yes
Silicone Coating on High Voltage Area		Yes

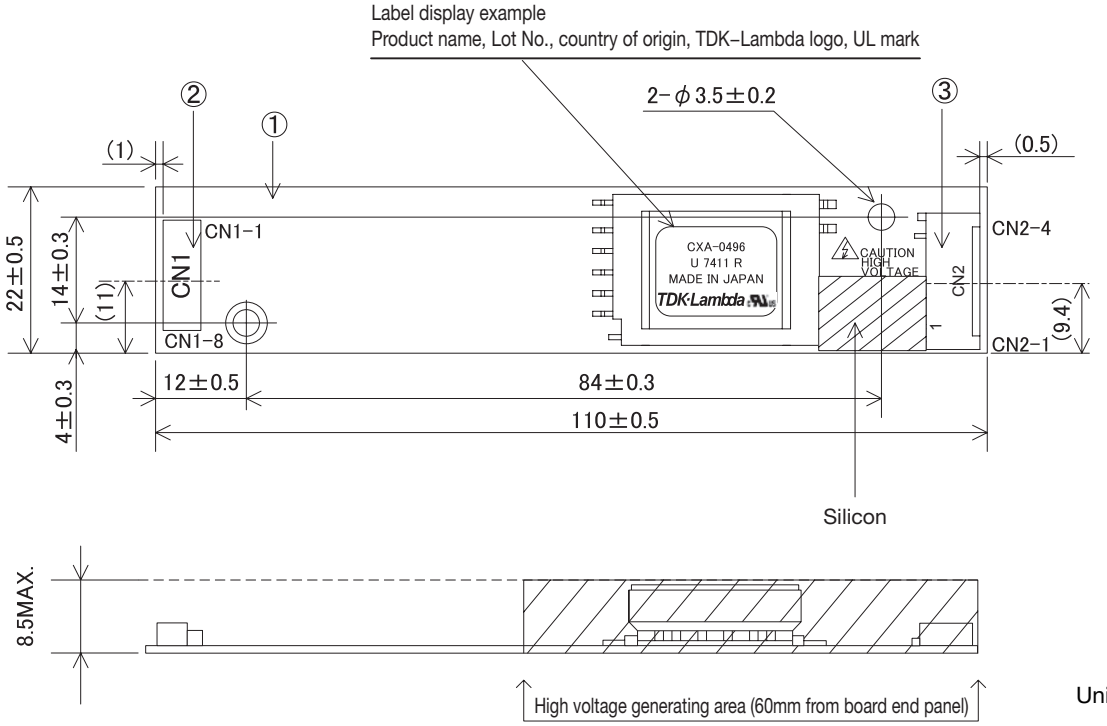
(*3) These dimensions are indicated the maximum only H. Others are typical values.

■ 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.

・All specifications are subject to change without notice.

Outline Drawing



Unit: mm

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	SM03(7-D1)B-BHS-1-TB(LF)(SN)	1	J.S.T Mfg., Co., Ltd	BHR-04VS-1

Terminal Number & Function

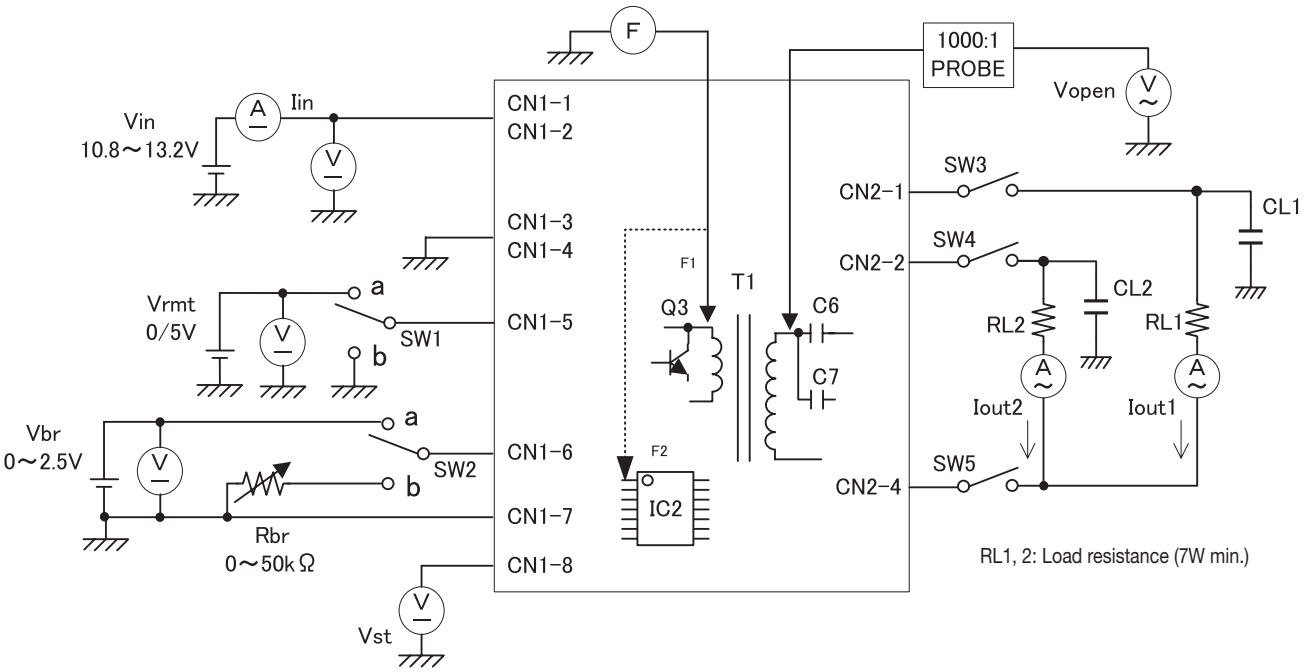
Input side CN1

Terminal No.	Connection		Remarks
	Symbol	Rating	
CN1-1	Vin	12±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 2.5V to Vin : ON
CN1-6	Vbr1/Rbr1	0 to 2.5V/0 to 50kΩ	Dimmer terminal 1
CN1-7	Vbr2/Rbr2	GND/0 to 50kΩ	Dimmer terminal 2
CN1-8	Vst(output)	0V/5V	Alarm output Lump open: 5V

Output side CN2

Terminal No.	Connection		Remarks
	Symbol	Rating	
CN2-1	$V_{HIGH}1$	432mVrms	Output 1
CN2-2	$V_{HIGH}2$	432mVrms	Output 2
CN2-3	N.C.	—	N.C.
CN2-4	V_{LOW}	(3V)	Output 1, 2 return

Connections



Operate as follows by switching a SW1.

SW1	Unit operates
a	Operates
b	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)

Operates as follows depending on ON-OFF of SW3 to 5.

SW3 to 5	Operates alarm output
Open	Operates (outputs 5V)
Close	Does not operate (outputs 0V)

Protection Circuit Operation

Load condition	Alarm output*1 (CN1-8)	Shutdown function*2
When load is normal	0.5V max.	Does not shut down
When 1 load (lamp) is NG	4.5～5.5V	Shuts down (after approx. 3 secs)

*1 If any one of switches SW3 to 6 becomes open, shutdown will operate, and warning (5V output) will be output.
*2 The inverter has built in protection function to stop operation after approximately 3 seconds when 1 or more loads is has become open.

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