

CXA-0490/CXA-0499

Features

- 1 output
 - Usable in a wide range of temperatures
 - Applicable panel size*: 3 to 15 inches
 - With brightness control function (Current dimming).
 - With shutdown 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-0490 / CXA-0499 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)	5.5	6	6.5	12±1.2	5	0	-	-30 to +85	120	Voltage dimmer (*1)
			5.5	6	6.5	12±1.2	5	-	0	-30 to +85	120	Volume dimmer (*1)
		Iout (Minimum dimmer)	2.5	3	3.5	12±1.2	5	3	-	-30 to +85	120	Voltage dimmer (*1)
			2.5	3	3.5	12±1.2	5	-	10	-30 to +85	120	Volume dimmer (*1)
Input Current	A	Iin1	-	0.5	0.8	12±1.2	5	0	0	-30 to +85	120	Remote ON
	mA	Iin2	-	-	1	12±1.2	0	0	0	-30 to +85	120	Remote OFF
Oscillatory Frequency	kHz	Freq1	50	55	60	12±1.2	5	0	0	-30 to +85	120	
Open Circuit Voltage	Vrms	Vopen	2200	2300	2500	12±1.2	5	0	0	-30 to +85	∞	Open load
Alarm Signal	V	Vst	4.5	5.0	5.5	12±1.2	5	0	0	-30 to +85	∞	In case of lamp anomaly (*2)
			-	0	0.5	12±1.2	5	0	0	-30 to +85	120	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

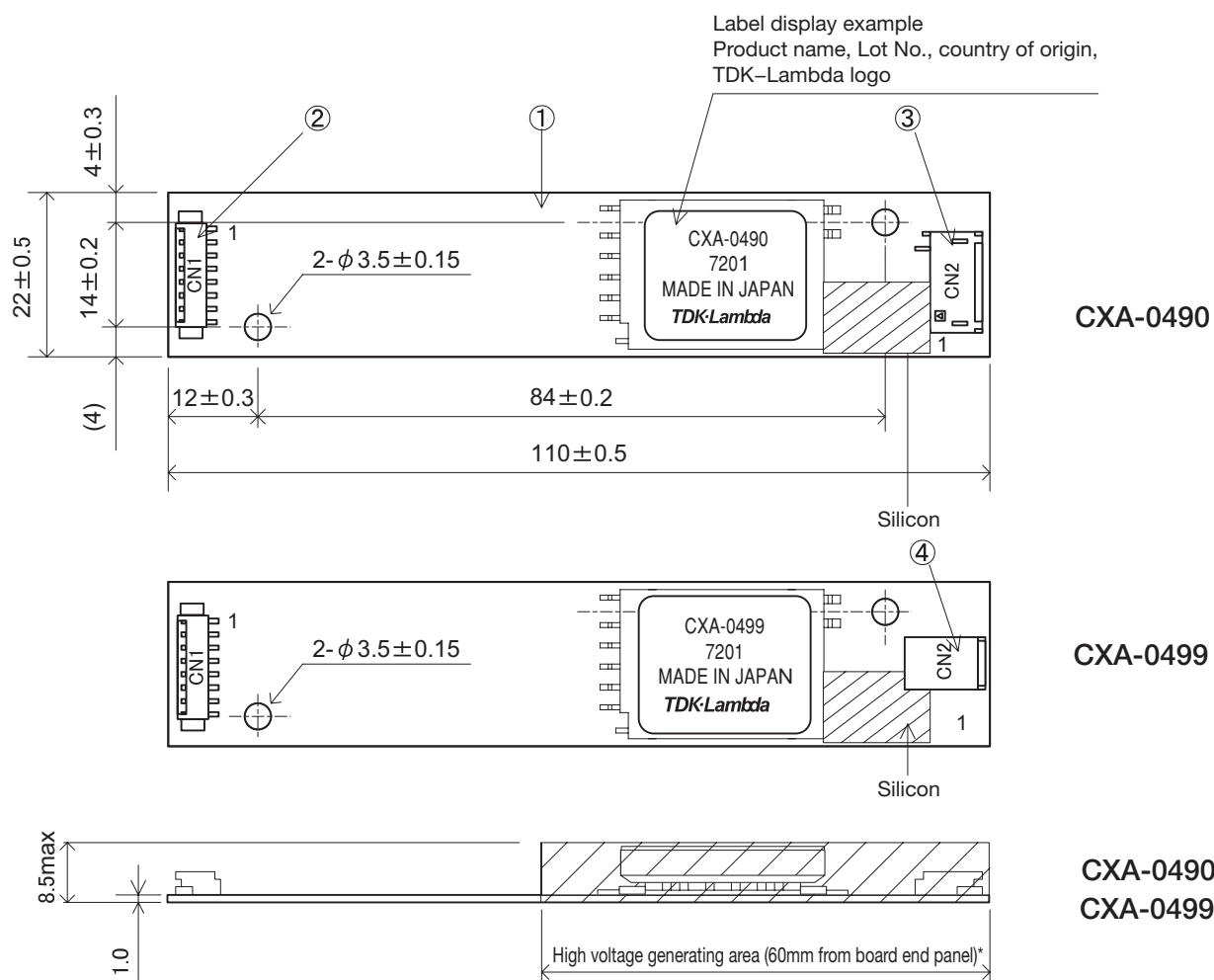
Dimming Function		Yes
Operating Temperature	°C	-30 to +85
Storage Temperature	°C	-40 to +85
Operating Humidity Ratio	RH%	95Max
Safety Standard		—
Weight	g	22typ.
Dimensions (WxDxH)	mm	110x22x8.5 (*3)
Fused Input		Yes
Remote ON / OFF		Yes
Alarm Signal Function		Yes
Shutdown Function		Yes
Silicone Coating 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.

Outline Drawing



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

Unit: mm

Connector

No.	Component name	Type name	Qty	Manufacturer	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-TB(LF)(SN)	1	J.S.T Mfg., Co., Ltd	CXA-0490	BHR-03VS-1
④	Output connector CN2	SM02B-BHSS-1-TB(LF)(SN)	1	J.S.T Mfg., Co., Ltd	CXA-0499	BHSR-02VS-1

Terminal Number & Function

Input side CN1

Terminal No.	Connection		Remarks
	Symbol	Rating	
CN1-1	Vin	$12 \pm 1.2V$	Power source input
CN1-2			
CN1-3	GND	0V	Ground
CN1-4			
CN1-5	Vrmt	0V/5.0V to Vin	Remote terminal 0 to 1.5V : OFF 2.5V to Vin : ON
CN1-6	Vbr1/Rbr1	0 to 3.0V/0 to 10K Ω	Dimmer terminal 1
CN1-7	Vbr2/Rbr2	GND/0 to 10K Ω	Dimmer terminal 2
CN1-8	Vst (output)	0V/5V	Alarm output Lamp open : 5V

Output side CN2 (CXA-0490)

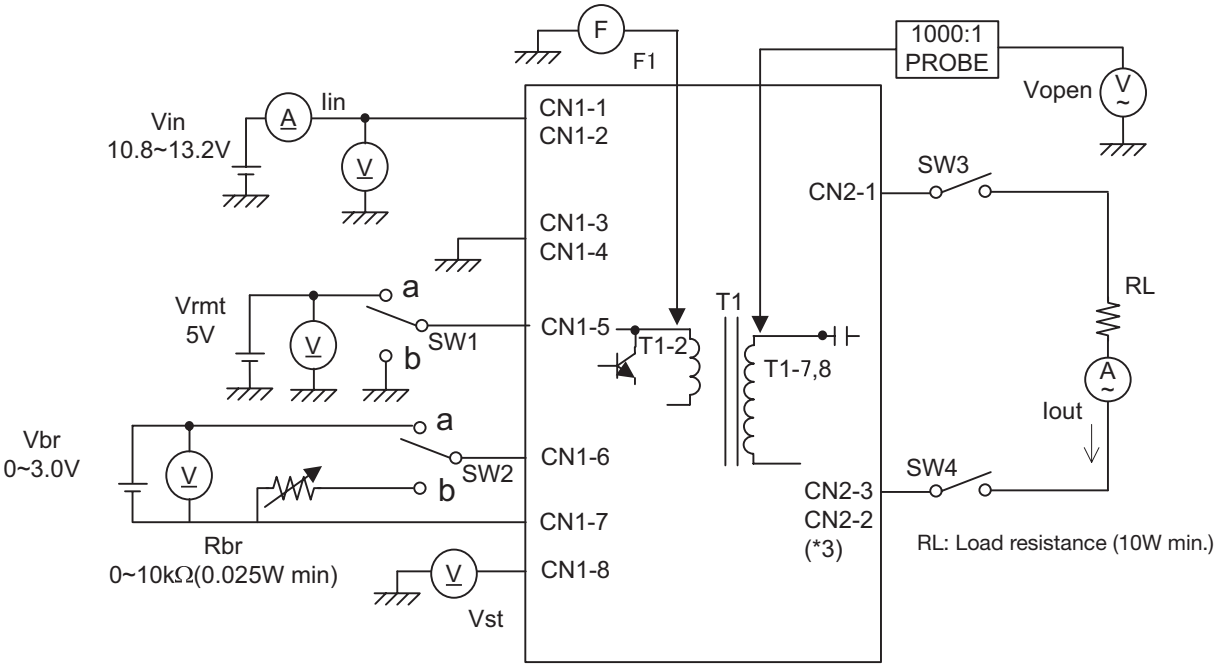
Terminal No.	Connection		Remarks
	Symbol	Rating	
CN2-1	V _{HIGH}	720Vrms	Output
CN2-2	NC	—	N.C.
CN2-3	V _{LOW}	(2V)	Output return

Output side CN2 (CXA-0499)

Terminal No.	Connection		Remarks
	Symbol	Rating	
CN2-1	V _{HIGH}	720Vrms	Output
CN2-2	V _{LOW}	(2V)	Output return

Connections

DC-AC Inverter



(*3) CN2-3 : CXA-0490、CN2-2 : CXA-0499

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 3.0V (0V: Maximum brightness)
b	Volume dimmer VR = 0 to 10kΩ (0Ω: Maximum brightness)

Operates as follows depending on ON-OFF of SW3 & 4.
(When any one of the switches is open, 5V will be output to CN1 to CN8.)

SW3,4	Unit operates
Open	Operates (5V output)
Close	Does not operate (0V output)