

CXA-0307

Dimming/Connector Type

Features

- 1 output
- Applicable panel size*: 3 to 15 inches
- With brightness control function (Pulse Wide Modulation mode).
- 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-0307 Specifications (Please refer to each specification before use)

Electrical Characteristics

Item	Unit	Symbol	Specification			Condition						Remark
			min	typ	max	Vin(V)	Vrmt(V)	Vbr(V)	Rbr(kΩ)	Ta(°C)	RL(kΩ)	
Output Current	mA	Iout (Maximum dimmer)	5.5	6.0	6.5	12±0.6	5	0	-	23±5	95	Voltage dimmer (*1)
			5.5	6.0	6.5	12±0.6	5	-	0	23±5	95	Volume dimmer (*1)
			5.3	6.0	6.7	12±1.2	5	0	-	0 to +60	90 to 100	Voltage dimmer (*1)
			5.3	6.0	6.7	12±1.2	5	-	0	0 to +60	90 to 100	Volume dimmer (*1)
		Iout (Minimum dimmer)	1.8	2.5	3.2	12±0.6	5	2.5	-	23±5	95	Voltage dimmer (*1)
			1.8	2.5	3.2	12±0.6	5	-	50	23±5	95	Volume dimmer (*1)
			1.7	2.5	3.3	12±1.2	5	2.5	-	0 to +60	90 to 100	Voltage dimmer (*1)
			1.7	2.5	3.3	12±1.2	5	-	50	0 to +60	90 to 100	Volume dimmer (*1)
Input Current	A	Iin1	-	0.45	0.65	12±0.6	5	0		0 to +60	95	Remote ON
	mA	Iin2	-		1	12±0.6		0		0 to +60	90 to 100	Remote OFF
Frequency	kHz	Freq1	45	50	55	12±0.6	5	0		0 to +60	90 to 100	
	Hz	Freq2 (Duty frequency)	215	270	325	12±0.6	5	2.5	50	0 to +60	90 to 100	
Open Circuit Voltage	Vrms	Vopen	1400	1500	-	10.8min.	5	0		0 to +60	∞	Open load
Alarm Signal	V	Vst	4.5	5.0	5.5	12±1.2	5	0		0 to +60	∞	In case of lamp anomaly (*2)
			-	0	0.5	12±1.2	5	0		0 to +60	95	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

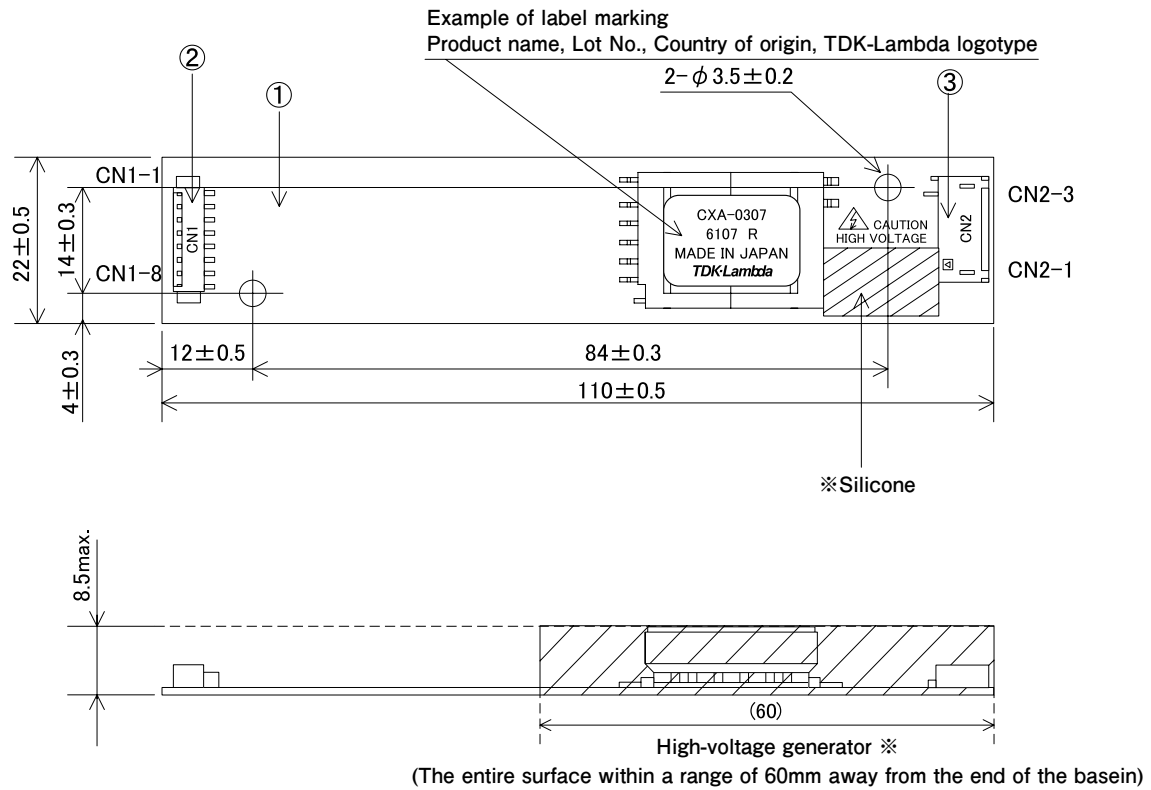
Dimming Function		Yes
Operating Temperature	°C	0 to +70
Storage Temperature	°C	-30 to +85
Operating Humidity Ratio	RH%	95Max
Safety Standard		—
Weight	g	22
Dimensions(WxDxH)	mm	110x22x8.5 (*3)
Fused Input		Yes
Remote ON / OFF		Yes
Alarm Signal Function		Yes
Shutdown Function		Yes
Silicone Coating on 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

Connector number	Part number	Model	Quantity	Remarks	Recommended applicable connector
①	Printed circuit board PCB	Composite (CEM-3)	1	UL94V-0 t=1.0	—
②	Input connector CN1	53261-0871	1	Molex Inc.	51021-0800
③	Output connector CN2	SM02 (8.0) B-BHS-1-TB (LF) (SN)	1	JST Mfg. Co., Ltd.	BHR-03VS-1

Terminal Numbers And Functions

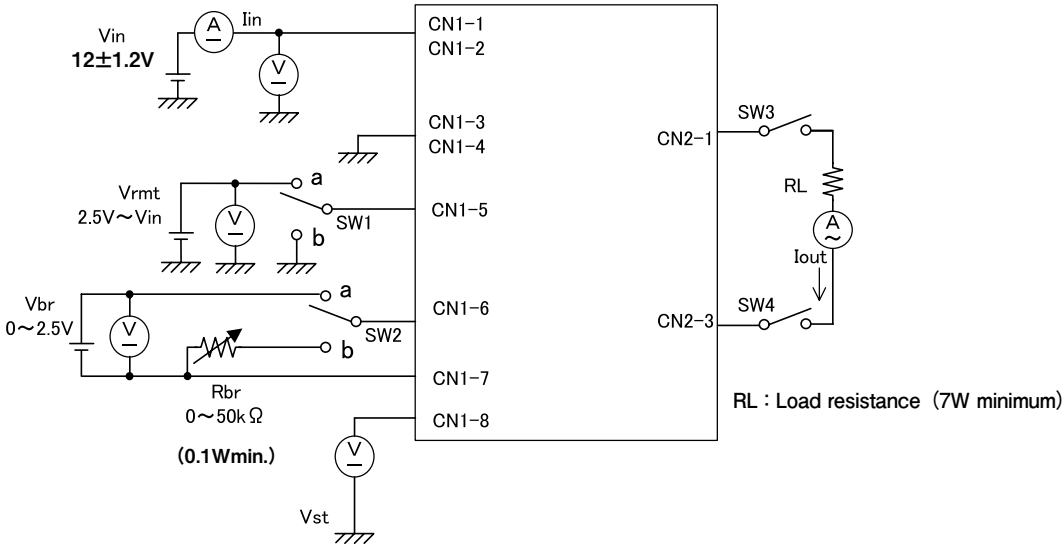
Input side CN1

Terminal number	Symbol	Rated voltage	Remarks
CN1-1	Vin	10.8 to 13.2V	Power 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 V : 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 number	Symbol	Rated voltage	Remarks
CN2-1	V _{HIGH}	600Vrms	Output
CN2-2	NC	—	—
CN2-3	V _{LOW}	(2V)	Output return

Connections



Operate by ON-OFF of SW1 as follows.

SW1	Unit operation
a	Operation
b	Does not operate
Open	Does not operate

Operate by ON-OFF of SW2 as follows.

SW2	Unit operation
a	Voltage dimmer Vbr=0 to 2.5V
b	Volume dimmer VR=0 to 50kΩ

※Vbr=0V:Maximum brightness
Rbr=0Ω:Maximum brightness

Protection circuit operation

Load condition	Alarm output (CN1-8)*1	Shut-down function*1
Normal condition	0.5V max.	Does not shut down
When 1 load (lamp) is run-out	5±0.5V	Shut 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.