

# Power Supplies

## CXA Series CXA-0308

### DC to AC Inverters

### Connector type, Dimming, 8W, for 2 Bulbs

#### FEATURES

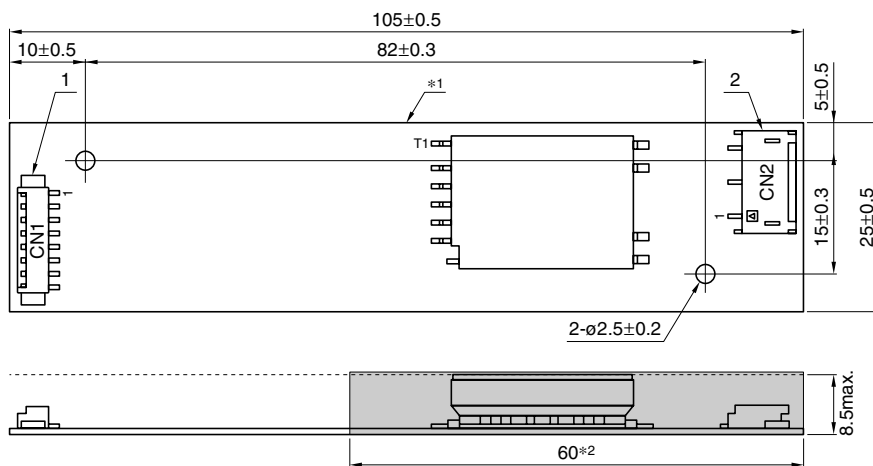
- For 2 bulbs.
- Corresponding to wide operating temperature range.
- Applicable panel size\* : 10 to 12-inch
- With brightness control function (Pulse Wide Modulation mode).
- With lamp failure detector.
- The high-voltage terminals and patterns are coated with silicone so as to avoid the defects caused by dust.

\* The applicable panel size is for typical reference dimensions.

#### TEMPERATURE AND HUMIDITY RANGES

Temperature range (°C)	Operating	-10 to +70
	Storage	-30 to +85
Humidity range(%)RH		95max. [Maximum wet-bulb temperature 38°C . No dew.]

#### SHAPES AND DIMENSIONS



Weight: 20.0g typ.

Dimensions in mm

\*1 Substrate(PWB: Printed wiring board): Flame retardant material UL94V-0(FR-4 or CEM-3) t=1mm

\*2 : High-voltage generator (The entire surface within a range of 60mm away from the end of the base in the output)

	Connector manufacturer's company and type			Symbol
1	Input connector	Molex Japan Co., Ltd.	53261-0890	CN1
2	Output connector	Japan Solderless Terminal Co., Ltd.	SM03(4.0)B-BHS-1	CN2

#### TERMINAL NUMBERS AND FUNCTIONS

CN1			CN2			
Terminal No.	Function	Symbol	Terminal No.	Function	Symbol	
CN1-1	Input voltage Edc: 10.8 to 13.2V/12V[nom.]	Vin	CN2-1	Output [Low voltage] (2V)	V <sub>Low</sub>	
CN1-2			CN2-2	Output 2 [High voltage] Irms	2 to 5mA	V <sub>HIGH2</sub>
CN1-3	0V	GND	CN2-3	Output 1 [High voltage] Irms	2 to 5mA	V <sub>HIGH1</sub>
CN1-4						
CN1-5	Remote voltage Edc 0 to 0.4V: off/2.5 to 13.2V:on	V <sub>rmt</sub>				
CN1-6	Brightness dimmer voltage *1 Edc: 0 to 2.5V (Maximum brightness on 0V)	V <sub>br1</sub>				
	Brightness dimmer *2 VR resistance VR: 0 to 50kΩ (Maximum brightness on 0Ω)	R <sub>br1</sub>				
CN1-7	Brightness dimmer voltage Edc: GND	V <sub>br2</sub>				
	Brightness dimmer VR resistance VR: 0 to 50kΩ	R <sub>br2</sub>				
CN1-8	Lamp failure detector 0V: Normal condition / 5V: Abnormal condition	V <sub>st</sub>				

\*1 Brightness can be controlled by adjusting V<sub>br</sub> within a range of 0 to 2.5V.

\*2 Brightness can be controlled by adjusting R<sub>br</sub> within a range of 0 to 50kΩ.

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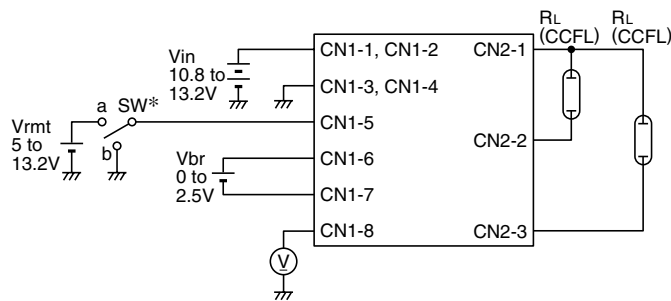
Connector type, Dimming, 8W, for 2 Bulbs

## ELECTRICAL CHARACTERISTICS

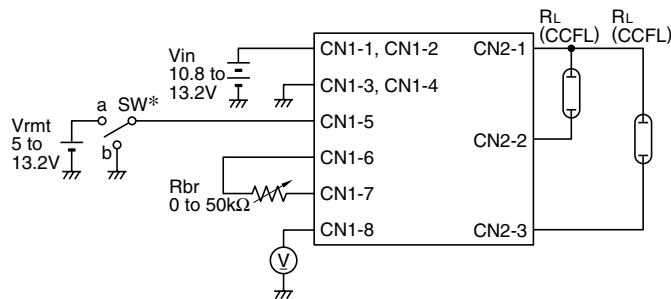
Item	Unit	Symbol	Specification			Condition				Brightness
			min.	typ.	max.	Vin(V)	Vbr(V)/Rbr(kΩ)	Ta(°C)	RL(kΩ)	
Output current I <sub>rms</sub>	mA	I <sub>out</sub>	4.3	5.0	5.7	12±1.2	0/0	-10 to +70	95 to 105	Maximum
			4.5	5.0	5.5	12±0.6	0/0	23±5	100	Maximum
			1.2	2.0	2.8	12±1.2	2.5/50	-10 to +70	95 to 105	Minimum
			1.3	2.0	2.7	12±0.6	2.5/50	23±5	95 to 105	Minimum
Input current I <sub>dc</sub>	A	I <sub>in</sub>	—	0.55	0.75	12±0.6	0/0	-10 to +70	100	
Oscillation frequency	kHz	FL	50	55	60	12±0.6	0/0	-10 to +70	95 to 105	
Open circuit output voltage E <sub>rms</sub>	kV	Vopen	1.2	1.25	1.5	10.8min.	0/0	-10 to +70	∞	

## TYPICAL CONNECTIONS

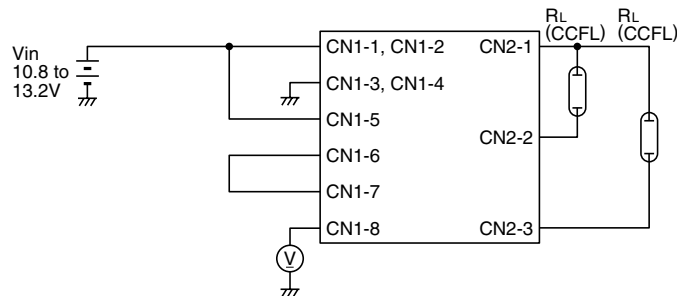
### EXAMPLE OF VOLTAGE DIMMER CONTROL



### EXAMPLE OF POTENTIOMETER DIMMER CONTROL



### NO DIMMER CONTROL



\* SW a:on, b:off

## BRIGHTNESS DIMMER VOLTAGE- OUTPUT CURRENT CHARACTERISTICS

