

# Power Supplies

## CXA Series CXA-K0505-VJL

### DC to AC Inverters

### Connector type, Dimming, 2W, For 1 Bulb

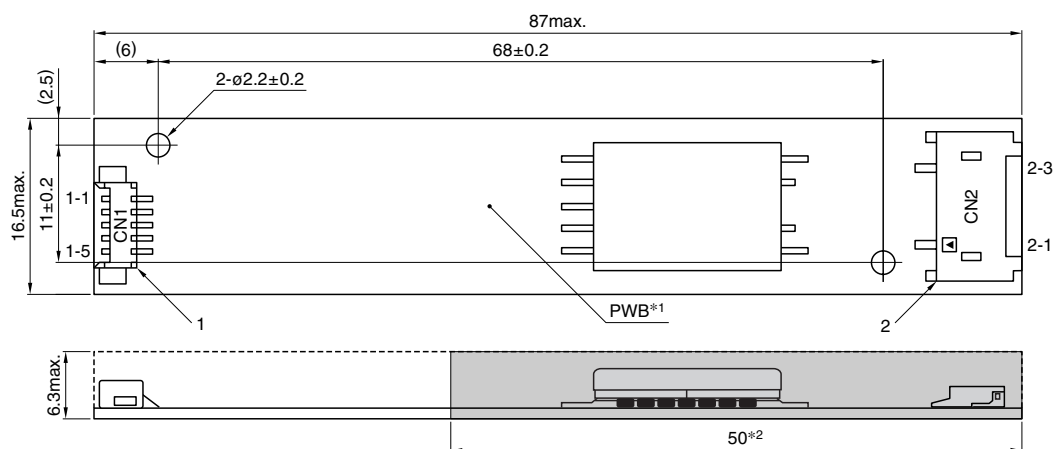
#### FEATURES

- The CXA-K0505-VJL is an inverter for cold cathode fluorescent lamps and features a built-in dimmer.
- Because they employ advanced output current control, fluctuations in input voltage, load, and distributed capacitance have virtually no effect on brightness.
- Output open and short circuit conditions result in no damage, heat generation, or other difficulties.
- The bottom of the board has a flat structure that facilitates insulation.
- These parts are ultra-thin with a maximum thickness of only 6.3mm.
- Safe design that includes a built-in overcurrent protection element.

#### TEMPERATURE AND HUMIDITY RANGES

Temperature range (°C)	Operating	0 to +60
	Storage	−30 to +85
Humidity range(%)RH		95max.
		[Maximum wet-bulb temperature 38°C]

#### SHAPES AND DIMENSIONS



\*1 Substrate (PWB: Printed wiring board): Flame retardant material 94V-0 (FR-4 or CEM-3)  $t=0.8\text{mm}$

\*2 : High-voltage generator (The entire surface within a range of 50mm away from the end of the base in the output)

Weight: 9g typ.

Dimensions in mm

	Connector manufacturer's company and type			Symbol
1	Input connector	Morex Japan Co., Ltd.	53261-0590	CN1
2	Output connector	Japan Solderless Terminal Co., Ltd.	SM02(8.0)B-BHS-1	CN2

#### TERMINAL NUMBERS AND FUNCTIONS

##### CN1

Terminal No.	Functions	Symbol
CN1-1	Input voltage Edc: 5 to 12V 5V[nom.]	V <sub>in</sub>
CN1-2	0V	GND
CN1-3	Remote voltage Edc 0V: off/5 to 12V:on	V <sub>rmt</sub>
CN1-4	Brightness dimmer voltage* Edc: 0 to 3V(Maximum brightness on 0V)	V <sub>br</sub>
CN1-5	Used in the internal circuits, do not connect.	N.C.

\* Brightness can be controlled by adjusting V<sub>br</sub> within a range of 0 to 3V.

##### CN2

Terminal No.	Functions	Symbol
CN2-1	Output[High voltage] I <sub>rms</sub> 2 to 5mA	V <sub>HIGH</sub>
CN2-2	—	N.C.
CN2-3	Output[Low voltage] (2V)	V <sub>LOW</sub>

• All specifications are subject to change without notice.

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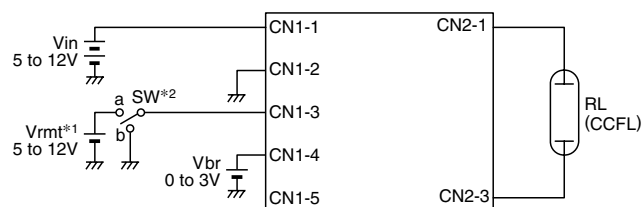
Connector type, Dimming, 2W, For 1 Bulb

### ELECTRICAL CHARACTERISTICS

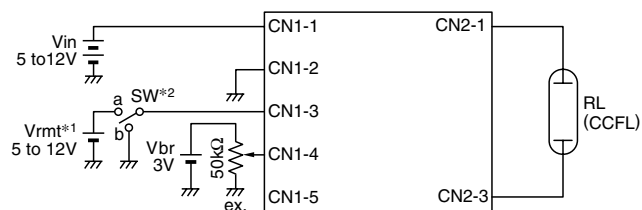
Items	Unit	Symbol	Specifications			Conditions		RL(kΩ)	Brightness
			min.	typ.	max.	Vin(V)	Vbr(V)		
Output current I <sub>rms</sub>	mA	I <sub>out</sub>	4.1	5	5.9	5 to 12	0	0 to +50	Maximum
			4.5	5	5.5	5	0	60 to 80	Maximum
			1.5	2	2.5	5	3	140	Minimum
Input current I <sub>dc</sub>	A	I <sub>in</sub>	—	0.5	0.66	5 to 12	0	0 to +50	60 to 80
Oscillation frequency	kHz	F <sub>L</sub>	35	40	45	5 to 12	0	0 to +50	60 to 80
Open circuit output voltage E <sub>rms</sub>	V	V <sub>open</sub>	900	1100	—	5 to 12	0	0 to +50	∞

### TYPICAL CONNECTIONS

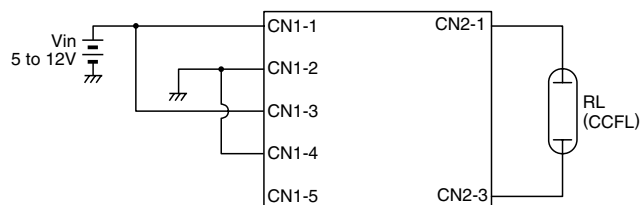
#### EXAMPLE OF VOLTAGE DIMMER CONTROL



#### EXAMPLE OF POTENTIOMETER DIMMER CONTROL



#### NO DIMMER CONTROL



\*1 V<sub>rmt</sub> (remote voltage) shall be ON after V<sub>in</sub> was ON.

\*2 SW a:on, b:off

### BRIGHTNESS DIMMER VOLTAGE-OUTPUT CURRENT CHARACTERISTICS

