

# Power Supplies

## DC to AC Inverters

### For 1 Bulb, 5W Diming

CXA Series CXA-L0612A-VJL

This DC to AC inverter unit is designed for dimming-type cold cathode lamps. This inverter can be used for lighting a wide range of single cold cathode fluorescent lamps.

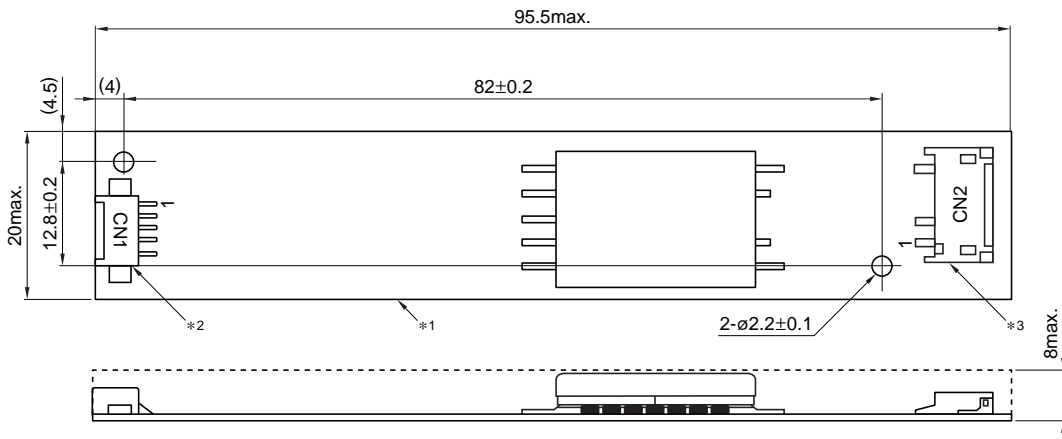
#### FEATURES

- Use of output current control avoids effects resulting from input voltage, load, and distributed capacitance variation.
- This inverter unit is appropriate for use with 6 to 13 inch LCDs since the typical open circuit voltage(initial lamp ignition voltage) is 1.8kVrms.
- Safe design that includes a built-in overcurrent protection element.
- Insulation is simplified due to flat backside surface of board.
- Excellent inverter for ignition of U-shaped cold cathode fluorescent lamps.

#### TEMPERATURE AND HUMIDITY RANGES

Temperature range	Operating	0 to +60°C
	Storage	-20 to +85°C
Humidity range	95(%)RH max.	
	[Maximum wet-bulb temperature:38°C]	

#### SHAPES AND DIMENSIONS



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

\*2 CN1: Molex Japan Co., Ltd. 53261-0510

\*3 CN2: Japan Solderless Terminal Co., Ltd. SM02(8.0)B-BHS-1

Weight: 14.5g typ.

Dimensions in mm

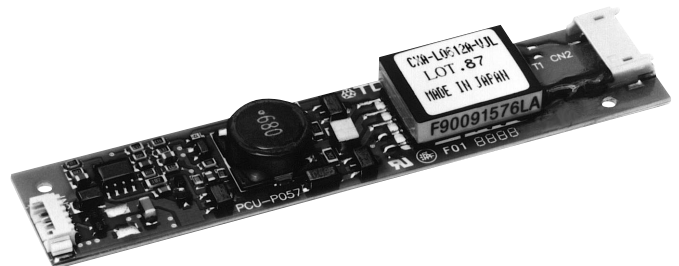
#### TERMINAL NUMBERS AND FUNCTIONS

##### CN1

Terminal No.	Functions
CN1-1	V <sub>in</sub> Input voltage Edc:9.6 to 15V
CN1-2	GND 0V
CN1-3	V <sub>rmt</sub> Reote voltage Edc:0/5 to 15V[5 to 15V operating]
CN1-4	V <sub>br</sub> Brightness dimmer voltage Edc:0 to 4V [0V maximum brightness]
CN1-5	NC Do not connect. Used by internal circuitry.

##### CN2

Terminal No.	Functions
CN2-1	V <sub>HIGH</sub> Output [High voltage] Irms:1.6 to 6mA
CN2-2	NC
CN2-3	V <sub>LOW</sub> Output[Low voltage]:(2V)



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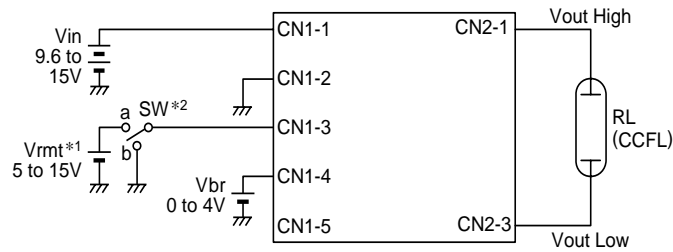
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#### ELECTRICAL CHARACTERISTICS

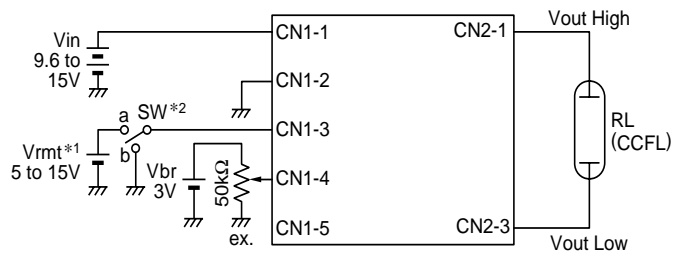
Item	Specifications			Conditions				Brightness		
	min.	typ.	max.	Vin(V)	Vbr(V)	Ta(°C)	RL(kΩ)			
Output current	Irms(mA)	Iout	5.3	6	6.7	9.6 to 15	0	0 to +60	90 to 130	Maximum
			5.4	6	6.6	9.6 to 15	0	23±5	100	Maximum
			1.3	1.6	1.9	9.6 to 15	4	23±5	520	Minimum
Input current	I <sub>dc</sub> (A)	I <sub>in</sub>	—	0.4	0.65	12	0	0 to +60	90 to 130	
Oscillation frequency	(kHz)	FL	48	58	68	9.6 to 15	0	0 to +60	90 to 130	
Open circuit output voltage	Erms(V)	V <sub>open</sub>	1500	1800	—	9.6 to 15	0 to 3	0 to +60	∞	

#### TYPICAL CONNECTIONS

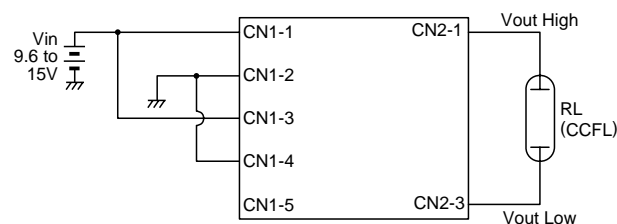
##### EXAMPLE OF VOLTAGE DIMMER CONTROL



##### 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

#### OUTPUT CURRENT vs. BRIGHTNESS DIMMER VOLTAGE CHARACTERISTICS

