

# DC to AC Inverters

## Connector type, Dimming, 5W, for 1 Bulb

Conformity to RoHS Directive

### CXA Series CXA-L0612A-VJL

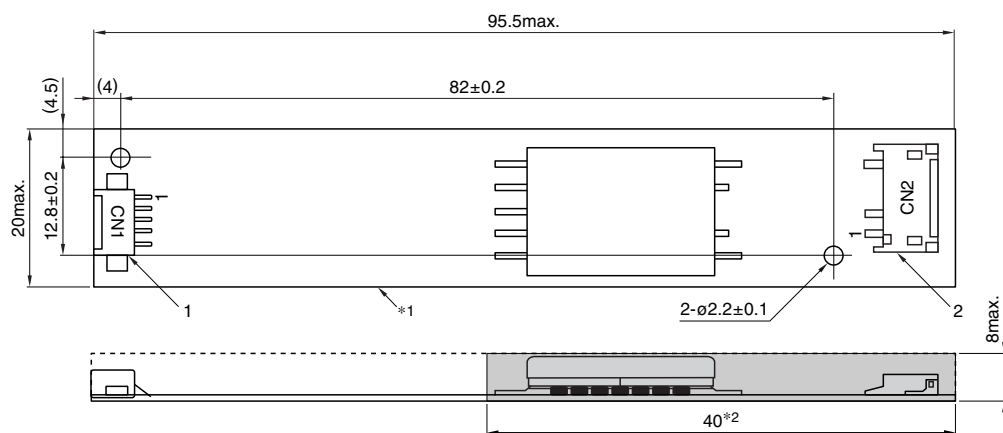
#### FEATURES

- 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(typ.).
- 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.
- The high-voltage terminals and patterns are coated with silicone so as to avoid the defects caused by dust.
- It is a product conforming to RoHS directive.

#### TEMPERATURE AND HUMIDITY RANGES

Temperature range (°C)	Operating	0 to +70
	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 UL94V-0(FR-4 or CEM-3)  $t=1\text{mm}$

\*2 : High-voltage generator (The entire surface within a range of 40mm away from the end of the base in the output)

Weight: 14.5g typ.

Dimensions in mm

	Connector manufacturer's company and type		Symbol	
1	Input connector	Molex Japan Co., Ltd.	53261-0571	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: 9.6 to 15V 12V[nom.]	V <sub>in</sub>
CN1-2	0V	GND
CN1-3	Remote voltage Edc 0V: off/5 to 5.25V:on	V <sub>mt</sub>
CN1-4	Brightness dimmer voltage* Edc: 0 to 4V(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 4V.

##### CN2

Terminal No.	Functions	Symbol
CN2-1	Output 1[High voltage] I <sub>rms</sub> 1.6 to 6mA	V <sub>HIGH</sub>
CN2-2	—	N.C.
CN2-3	Output[Low voltage] (2V)	V <sub>LOW</sub>

- 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.

- All specifications are subject to change without notice.

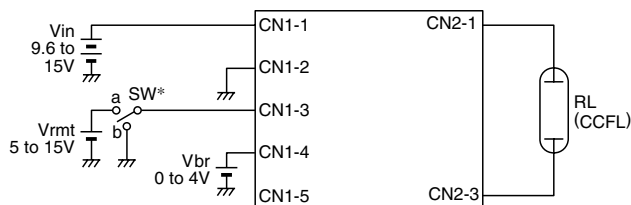
## CXA-L0612A-VJL

### ELECTRICAL CHARACTERISTICS

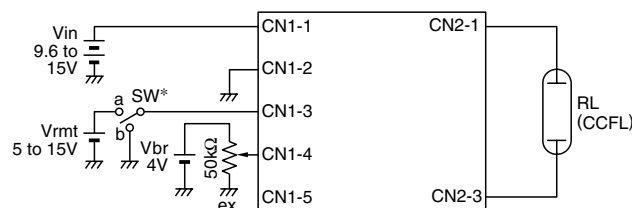
Items	Unit	Symbol	Specifications			Conditions		Brightness		
			min.	typ.	max.	Vin(V)	Vbr(V)		Ta(°C)	RL(kΩ)
Output current I <sub>rms</sub>	mA	I <sub>out</sub>	5.3	6	6.7	9.6 to 15	0	0 to +70	90 to 130	Maximum
			5.4	6	6.6	9.6 to 15	0	23±5	100	Maximum
			1.3	1.6	1.9	9.6 to 15	4	23±5	520	Minimum
Input current I <sub>dc</sub>	A	I <sub>in</sub>	—	0.4	0.65	12	0	0 to +70	90 to 130	
Oscillation frequency	kHz	FL	48	58	68	9.6 to 15	0	0 to +70	90 to 130	
Open circuit output voltage E <sub>rms</sub>	V	V <sub>open</sub>	1500	1800	—	9.6 to 15	0 to 3	0 to +70	∞	

### TYPICAL CONNECTIONS

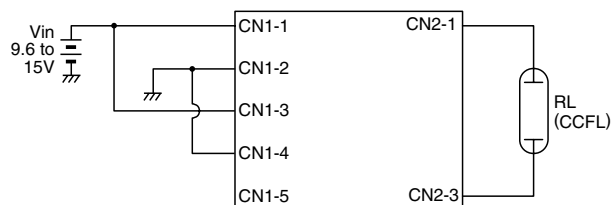
#### EXAMPLE OF VOLTAGE DIMMER CONTROL



#### EXAMPLE OF POTENTIOMETER DIMMER CONTROL



#### NO DIMMER CONTROL (BRIGHTNESS MAX.)



\* SW a: on, b: off

### BRIGHTNESS DIMMER VOLTAGE-OUTPUT CURRENT CHARACTERISTICS

