

# DC to AC Inverters

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

Conformity to RoHS Directive

### CXA Series CXA-L0612A-VJL

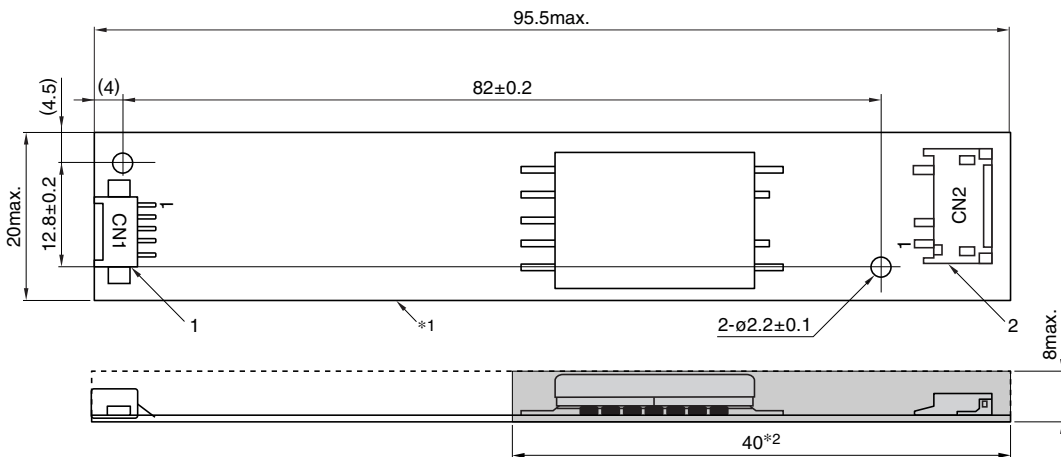
#### FEATURES

- 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<br>(°C) | Operating | 0 to +70   |
|                           | Storage   | -30 to +85                                       |
| Humidity range(%)RH       |           | 95max.<br>[Maximum wet-bulb temperature<br>38°C] |

#### SHAPES AND DIMENSIONS



\*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 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          |  |        | CN2          |  |        |
|--------------|--|--------|--------------|--|--------|
| Terminal No. | Functions  | Symbol | Terminal No. | Functions                              | Symbol |
| CN1-1        | Input voltage Edc: 9.6 to 15V 12V[nom.]                              | Vin    | CN2-1        | Output 1[High voltage] Irms 1.6 to 6mA | VHIGH  |
| CN1-2        | 0V   | GND    | CN2-2        | —                                      | N.C.   |
| CN1-3        | Remote voltage Edc 0V: off/5 to 5.25V:on                             | Vrmt   | CN2-3        | Output[Low voltage] (2V)               | VLOW   |
| CN1-4        | Brightness dimmer voltage*<br>Edc: 0 to 4V(Maximum brightness on 0V) | Vbr    |              |  |        |
| CN1-5        | Used in the internal circuits, do not connect.                       | N.C.   |              |  |        |

\* Brightness can be controlled by adjusting Vbr within a range of 0 to 4V.

- 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.

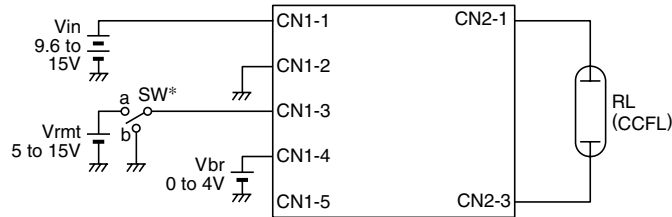
# CXA-L0612A-VJL

## ELECTRICAL CHARACTERISTICS

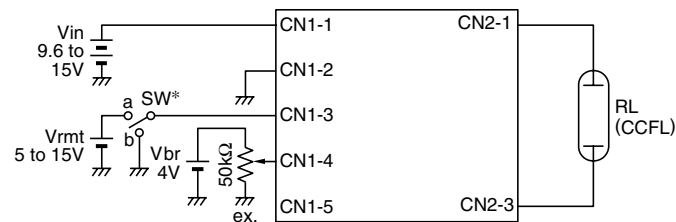
| Items  | Unit | Symbol            | Specifications |      |      | Conditions |        |          |           | Brightness |
|--|------|-------------------|----------------|------|------|------------|--------|----------|-----------|------------|
|  |      |                   | min.           | typ. | 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

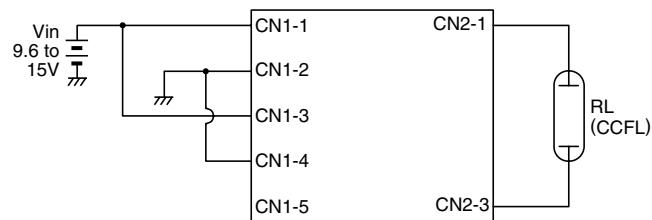
### EXAMPLE OF VOLTAGE DIMMER CONTROL



### EXAMPLE OF POTENTIOMETER DIMMER CONTROL



### NO DIMMER CONTROL (BRIGHTNESS MAX.)



\* SW a:on, b:off

## BRIGHTNESS DIMMER VOLTAGE-OUTPUT CURRENT CHARACTERISTICS

