

DC to AC Inverters

Connector type, Dimming, 8W, for 2 Bulbs

Conformity to RoHS Directive

CXA Series CXA-0308

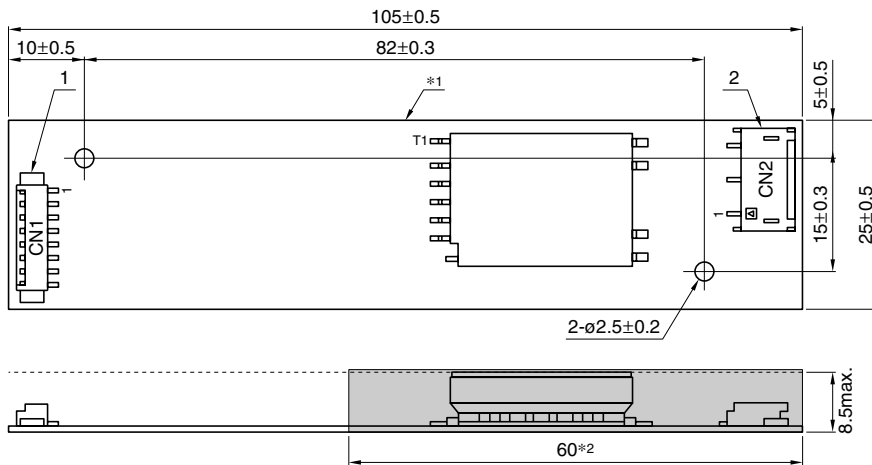
FEATURES

- 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.
- It is a product conforming to RoHS directive.
- * 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. | 53261-0871 CN1 |
| 2 | Output connector | Japan Solderless Terminal Co., Ltd. | SM03(4.0)B-BHS-1 CN2 |

TERMINAL NUMBERS AND FUNCTIONS

CN1

| Terminal No. | Function | Symbol |
|--------------|---|--------|
| CN1-1 | Input voltage Edc: 10.8 to 13.2V/12V[nom.] | Vin |
| CN1-2 | | |
| CN1-3 | 0V | GND |
| CN1-4 | Remote voltage Edc 0 to 0.4V: off/2.5 to 13.2V:on Brightness dimmer voltage *1 Edc: 0 to 2.5V(Maximum brightness on 0V) | Vrmt |
| CN1-5 | | |
| CN1-6 | Brightness dimmer *2VR resistance VR: 0 to 50kΩ(Maximum brightness on 0Ω) | Vbr1 |
| | Brightness dimmer voltage Edc: GND | Rbr1 |
| CN1-7 | Brightness dimmer VR resistance VR: 0 to 50kΩ | Vbr2 |
| | Brightness dimmer VR resistance VR: 0 to 50kΩ | Rbr2 |
| CN1-8 | Lamp failure detector 0V: Normal condition/5V: Abnormal condition | Vst |

*1 Brightness can be controlled by adjusting Vbr within a range of 0 to 2.5V.

*2 Brightness can be controlled by adjusting Rbr within a range of 0 to 50kΩ.

CN2

| Terminal No. | Function | Symbol |
|--------------|---------------------------------------|--------|
| CN2-1 | Output [Low voltage] (2V) | VLow |
| CN2-2 | Output 2 [High voltage] Irms 2 to 5mA | VHIGH2 |
| CN2-3 | Output 1 [High voltage] Irms 2 to 5mA | VHIGH1 |

• 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.

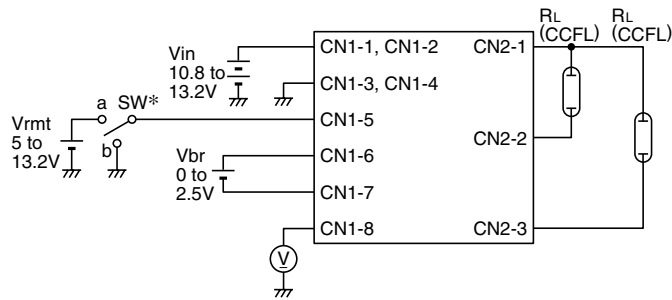
CXA-0308

ELECTRICAL CHARACTERISTICS

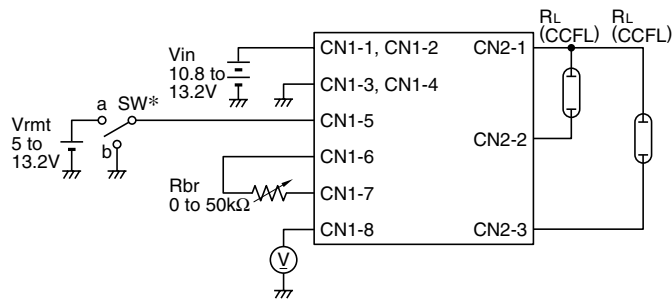
| Item | Unit | Symbol | Specification | | | Condition | | | Brightness | |
|--|------|-------------------|---------------|------|------|-----------|----------------|------------|------------|---------|
| | | | min. | typ. | max. | Vin(V) | Vbr(V)/Rbr(kΩ) | Ta(°C) | | RL(kΩ) |
| Output current I _{rms} | mA | I _{out} | 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 _{dc} | A | I _{in} | — | 0.55 | 0.75 | 12±0.6 | 0/0 | -10 to +70 | 100 | |
| Oscillation frequency | kHz | F _L | 50 | 55 | 60 | 12±0.6 | 0/0 | -10 to +70 | 95 to 105 | |
| Open circuit output voltage E _{rms} | kV | V _{open} | 1.2 | 1.25 | 1.5 | 10.8min. | 0/0 | -10 to +70 | ∞ | |

TYPICAL CONNECTIONS

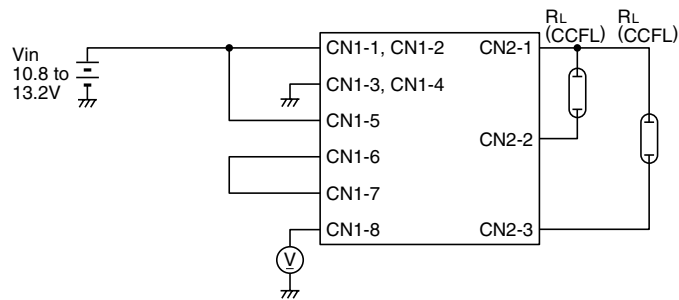
EXAMPLE OF VOLTAGE DIMMER CONTROL



EXAMPLE OF POTENTIOMETER DIMMER CONTROL



NO DIMMER CONTROL (BRIGHTNESS MAX.)



* SW a:on, b:off

BRIGHTNESS DIMMER VOLTAGE- OUTPUT CURRENT CHARACTERISTICS

