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CXA-0441

Dimming/Connector Type

■ Features

- 2-output
 - Applicable panel size*: 5 to 8 inches
 - With brightness control function (Pulse Wide Modulation mode).
 - With shut down function.
 - With a sensing function for running out of lamp (alarm output).
 - In the high-voltage generator(a terminal and a pattern), an anti-dust measure by silicone application is taken.
- (Notice) Applicable panel size becomes a standard.

■ Applications



CXA-0441 Specifications (Please refer to each specification before use)

Electrical Characteristics

| Item | Unit | Symbol | Specification | | | Condition | | | | | | Remark |
|----------------------|------|--------------------------|---------------|------|------|-----------|---------|--------|---------|------------|--------|------------------------------|
| | | | min | typ | max | Vin(V) | Vrmt(V) | Vbr(V) | Rbr(kΩ) | Ta(°C) | RL(kΩ) | |
| Output Current | mA | Iout (Maximum dimmer) | 4.5 | 5.0 | 5.5 | 5±0.5 | 5 | 2.5 | - | -10 to +75 | 90 | Voltage dimmer (*1) |
| | | | 4.5 | 5.0 | 5.5 | 5±0.5 | 5 | - | 10 | -10 to +75 | 90 | Volume dimmer (*1) |
| | | Iout (Minimum dimmer) | 2.1 | 2.6 | 3.1 | 5±0.5 | 5 | 0 | - | -10 to +75 | 90 | Voltage dimmer (*1) |
| | | | 2.1 | 2.6 | 3.1 | 5±0.5 | 5 | - | 0 | -10 to +75 | 90 | Volume dimmer (*1) |
| Input Current | A | Iin1 | - | 1.32 | 1.57 | 5±0.05 | 5 | 2.5 | 10 | -10 to +75 | 90 | Remote ON |
| | mA | Iin2 | - | 0.2 | 1.0 | 5±0.5 | 0 | 2.5 | 10 | -10 to +75 | 90 | Remote OFF |
| Frequency | kHz | Freq1 | 49.0 | 52.5 | 56.0 | 5±0.5 | 5 | 2.5 | 10 | -10 to +75 | 90 | |
| | Hz | Freq2(Duty frequency) | 241 | 255 | 269 | 5±0.5 | 5 | 0 | | -10 to +75 | 90 | |
| Open Circuit Voltage | Vrms | Vopen | 1250 | 1350 | 1600 | 4.5min. | 5 | 2.5 | 10 | -10 to +75 | ∞ | Open load |
| Alarm Signal | V | Vst | 4.0 | 5.1 | 5.5 | 5±0.5 | 5 | 2.5 | 10 | -10 to +75 | ∞ | In case of lamp anomaly (*2) |
| | | | - | 0 | 0.5 | 5±0.5 | 5 | 2.5 | 10 | -10 to +75 | 90 | On a normal operation (*2) |

(*1) Please refer to the connection diagram for details of a dimming method.

(*2) Please refer to the connection diagram for details of alarm output.

Other Specifications

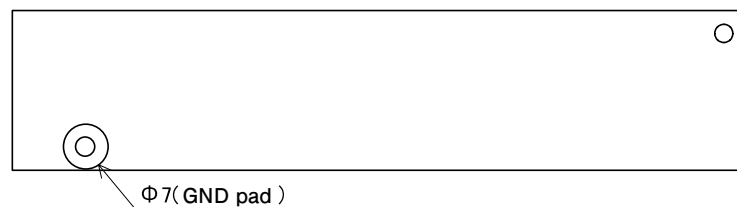
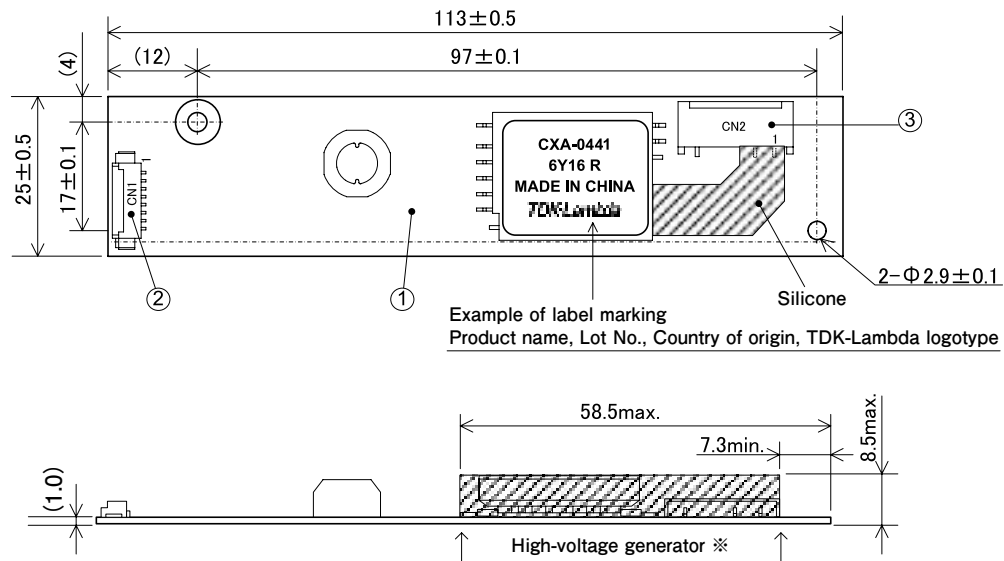
| | | |
|---------------------------------------|-----|-----------------|
| Dimming Function | | Yes |
| Operating Temperature | °C | -10 to +75 |
| Storage Temperature | °C | -20 to +85 |
| Operating Humidity Ratio | RH% | 95Max |
| Safety Standard | | — |
| Weight | g | 22 |
| Dimensions(WxDxH) | mm | 113x25x8.5 (*3) |
| Fused Input | | Yes |
| Remote ON / OFF | | Yes |
| Alarm Signal Function | | Yes |
| Shutdown Function | | Yes |
| Silicone Coating on High Voltage Area | | Yes |

(*3) These dimensions are indicated the maximum only H. Others are typical values.

■ 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.

Outline Drawing



unit:mm

Connector

| Connector number | Part number | Model/Material | Quantity | Remarks | Recommended applicable connector |
|------------------|---------------------------|----------------------------------|----------|--------------------|----------------------------------|
| ① | Printed circuit board PCB | Composite (CEM-3) | 1 | UL94V-0 t=1.0 | — |
| ② | Input connector CN1 | 53261-0871 | 1 | Molex Inc. | 51021-0800 |
| ③ | Output connector CN2 | SM03 (7-D1) B-BHS-1-TB (LF) (SN) | 1 | JST Mfg. Co., Ltd. | BHR-04VS-1 |

Terminal Numbers And Functions

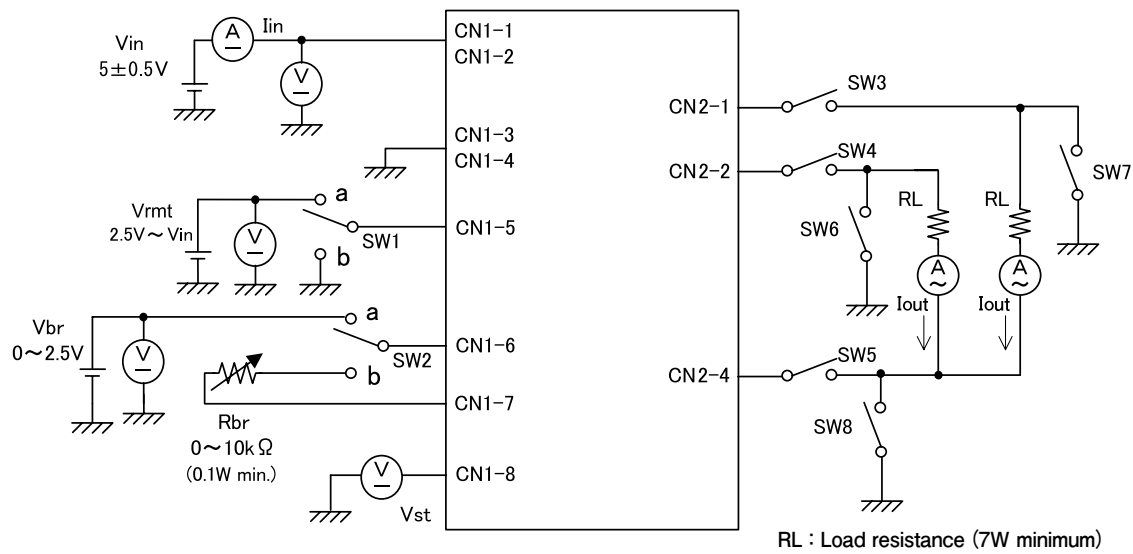
Input side CN1

| Terminal number | Symbol | Rated voltage | Remarks |
|-----------------|--------------|---------------------|--|
| CN1-1 | Vin | 5±0.5V | Power input |
| CN1-2 | | | |
| CN1-3 | GND | 0V | Ground |
| CN1-4 | | | |
| CN1-5 | Vrmt | 0V/2.5V to Vin | Remote terminal 0 to 0.4V : OFF 2.5 to Vin : ON Open : ON |
| CN1-6 | Rbr1/Vbr | 0 to 2.5V/0 to 10kΩ | Dimmer terminal 1 |
| CN1-7 | Rbr2 | 0 to 10kΩ | Dimmer terminal 2 |
| CN1-8 | Vst (Output) | 0V/5V | Alarm output Lump open : 5V |

Output side CN2

| Terminal number | Symbol | Rated voltage | Remarks |
|-----------------|--------------------|---------------|--------------------|
| CN2-1 | V _{HIGH1} | 450Vrms | Output 1 |
| CN2-2 | V _{HIGH2} | 450Vrms | Output 2 |
| CN2-3 | N.C. | — | N.C. |
| CN2-4 | V _{LOW} | (2V) | Output 1, 2 return |

Connections



Operate as follows by switching SW1.

| SW1 | Unit operation |
|------|------------------|
| a | Operation |
| b | Does not operate |
| Open | Operation |

Operate as follows by switching SW2.

| SW2 | Unit operation |
|-----|--|
| a | Voltage dimmer $V_{br}=0$ to $2.5V$ ($2.5V$: Maximum brightness) |
| b | Volume dimmer $V_R=0$ to $10k\Omega$ ($10k\Omega$: Maximum brightness) |

Operate by a switch of SW3 to 8 as follows.

| SW3 to 5 | Alarm output |
|----------|------------------------------|
| Open | Operation (5V output) |
| Close | Does not operate (0V output) |

| SW6 to 8 | Alarm output |
|----------|------------------------------|
| Open | Does not operate (0V output) |
| Close | Operation (5V output) |