

# CXA-0326

## Dimming/Connector Type

### ■ Features

- 2-output
  - Applicable panel size\*: 5 to 8 inches
  - With brightness control function (Pulse Wide Modulation mode).
  - 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-0326 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       | mArms | Iout<br>(Maximum dimmer) | 4.9           | 5.5  | 6.1  | 9 to 19   | 5       | 0      | -       | -10 to +70 | 68     | Voltage dimmer (*1)          |
|                      |       |                          | 4.9           | 5.5  | 6.1  | 9 to 19   | 5       | -      | 0       | -10 to +70 | 68     | Volume dimmer (*1)           |
|                      |       | Iout<br>(Minimum dimmer) | 1.9           | 2.5  | 3.1  | 9 to 19   | 5       | 2.5    | -       | -10 to +70 | 68     | Voltage dimmer (*1)          |
|                      |       |                          | 1.9           | 2.5  | 3.1  | 9 to 19   | 5       | -      | 50      | -10 to +70 | 68     | Volume dimmer (*1)           |
| Input Current        | A     | Iin1                     | -             |      | 0.75 | 9 to 19   | 5       | 0      |         | -10 to +70 | 68     | Remote ON                    |
|                      | mA    | Iin2                     | -             |      | 2    | 9 to 19   | 0       |        |         | -10 to +70 | 68     | Remote OFF                   |
| Frequency            | kHz   | Freq1                    | 49            | 55   | 61   | 9 to 19   | 5       | 0      |         | -10 to +70 | 68     |                              |
|                      | Hz    | Freq2(Duty frequency)    | 300           | 350  | 400  | 9 to 19   | 5       | 2.5    | 50      | -10 to +70 | 68     |                              |
| Open Circuit Voltage | Vrms  | Vopen                    | 1000          | 1300 | -    | 9 to 19   | 5       | 0      |         | -10 to +70 | ∞      | Open load                    |
| Alarm Signal         | V     | Vst                      | 4.5           | 5.0  | 5.5  | 9 to 19   | 5       | 0      |         | -10 to +70 | ∞      | In case of lamp anomaly (*2) |
|                      |       |                          | -             | 0    | 0.5  | 9 to 19   | 5       | 0      |         | -10 to +70 | 68     | 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

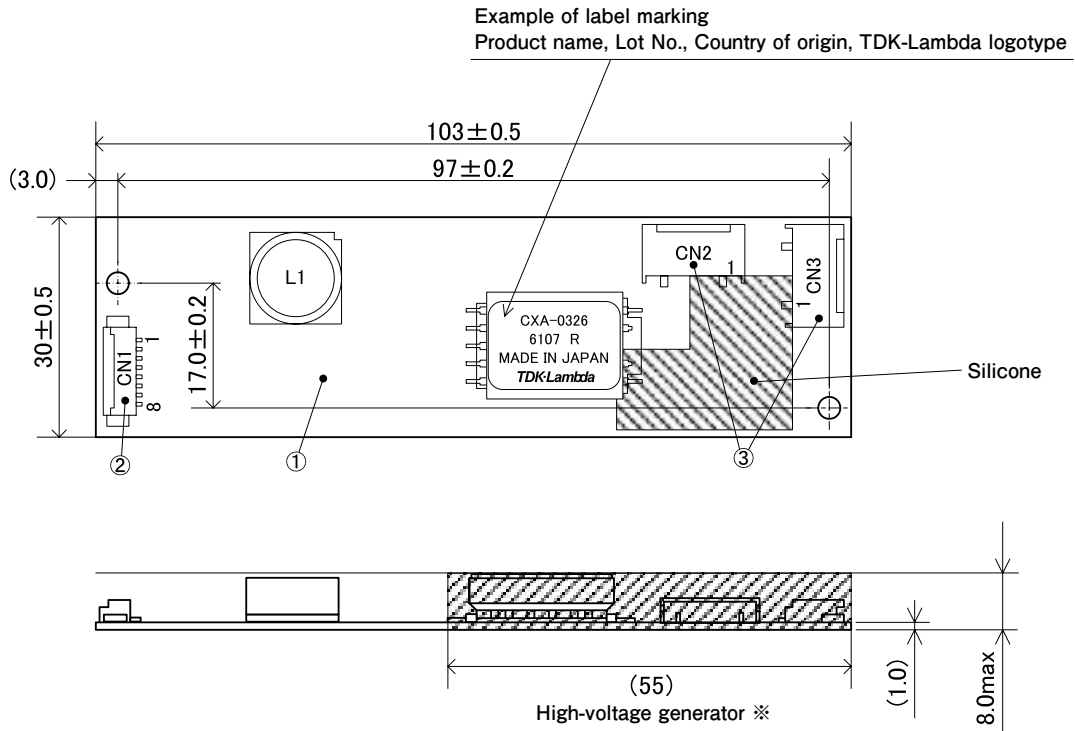
|                                       |     |               |
|---------------------------------------|-----|---------------|
| Dimming Function                      |     | Yes           |
| Operating Temperature                 | °C  | -10 to +70    |
| Storage Temperature                   | °C  | -30 to +85    |
| Operating Humidity Ratio              | RH% | 95Max         |
| Safety Standard                       |     | -             |
| Weight                                | g   | 20            |
| Dimensions(WxDxH)                     | mm  | 103x30x8 (*3) |
| Fused Input                           |     | Yes           |
| Remote ON / OFF                       |     | Yes           |
| Alarm Signal Function                 |     | Yes           |
| Shutdown Function                     |     | No            |
| 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



※From high-voltage generator, please secure space distance more than 2mm in top and bottom right and left.

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,CN3  | SM02 (8.0) B-BHS-1-TB (LF) (SN) | 2        | JST Mfg. Co., Ltd. | BHR-03VS-1                       |

### Terminal Numbers And Functions

#### Input side CN1

| Terminal number | Symbol       | Rated voltage       | Remarks   |
|-----------------|--------------|---------------------|---|
| CN1-1           | Vin          | 9.0 to 19.0V        | Power input   |
| CN1-2           |              |                     |   |
| CN1-3           | GND          | 0V                  | Ground  |
| CN1-4           |              |                     |   |
| CN1-5           | Vrmt         | 0V/2.5V to Vin      | Remote terminal<br>0 to 0.4V : OFF<br>2.5 to Vin : ON |
| CN1-6           | Vbr1/Rbr1    | 0 to 2.5V/0 to 50kΩ | Dimmer terminal1                                      |
| CN1-7           | Vbr2/Rbr2    | GND/0 to 50kΩ       | Dimmer terminal2                                      |
| CN1-8           | Vst (Output) | 0V/5V               | Alarm output<br>Lump open : 5V                        |

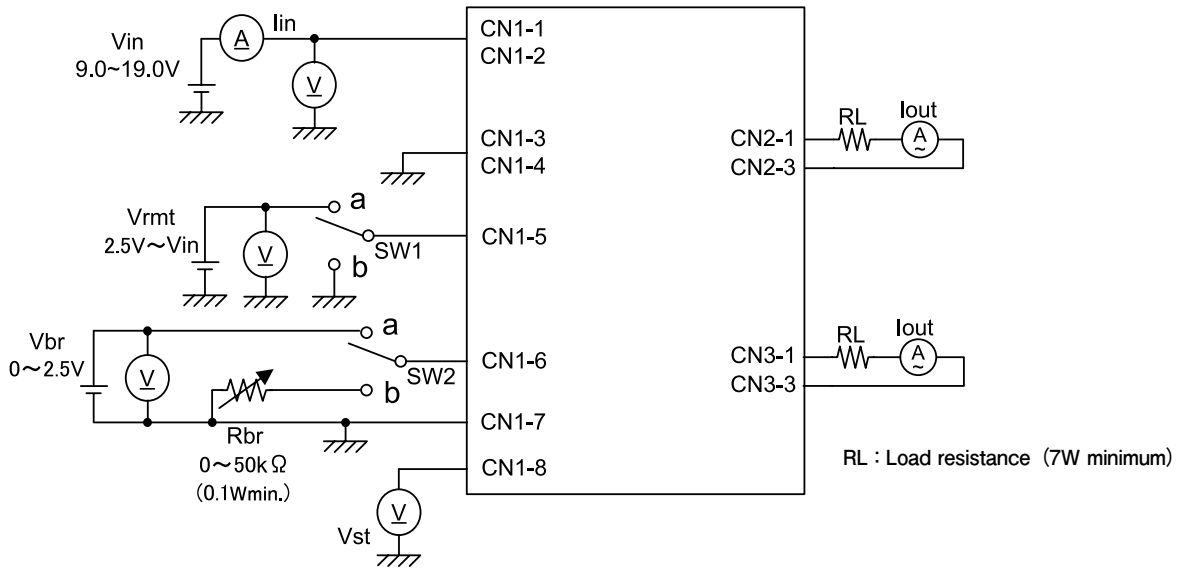
#### Output side CN2

| Terminal number | Symbol             | Rated voltage | Remarks         |
|-----------------|--------------------|---------------|-----------------|
| CN2-1           | V <sub>HIGH1</sub> | 400Vrms       | Output 1        |
| CN2-2           | —                  | N.C.          | —               |
| CN2-3           | V <sub>LOW1</sub>  | (2V)          | Output 1 return |

#### Output side CN3

| Terminal number | Symbol             | Rated voltage | Remarks         |
|-----------------|--------------------|---------------|-----------------|
| CN3-1           | V <sub>HIGH2</sub> | 400Vrms       | Output 2        |
| CN3-2           | —                  | N.C.          | —               |
| CN3-3           | V <sub>LOW2</sub>  | (2V)          | Output 2 return |

# Connections



Operate as follows by switching SW1.

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

Operate as follows by switching SW2.

| SW2 | Unit operation                  |
|-----|---------------------------------|
| a   | Voltage dimmer<br>Vbr=0 to 2.5V |
| b   | Volume dimmer<br>VR=0 to 50kΩ   |

※ Vbr=0V:Maximum brightness  
Rbr=0Ω:Maximum brightness

Protection circuit operation

| Load condition                   | ※ Alarm output (CN1-8) |
|----------------------------------|------------------------|
| Normal condition                 | 0.5V max.              |
| When 1 load (lamp) is run-out    | 5±0.5V                 |
| When 2 loads (lamps) are run-out | 5±0.5V                 |

※ When more than one of RL1-RL2 was opened, output alarm signal of 5V.