

# CL-690S Series

LED For Flash Light Source **CL-690S Series**



3.3(L)×3.3(W)×1.5(H)mm

- リフレクター付きの高出力タイプです。
- リフレクター形状を最適化することにより、小型化・高出力化を両立しています。
- High output type with reflector equipped.
- Compatibility achieved between compact design and high power thanks to optimization of reflector shape.

## ●絶対最大定格 Absolute Maximum Rating<sup>※1</sup>

(Ta 25°C)

| Product code | Pd (mW) | I <sub>F</sub> (mA) | I <sub>FP</sub> <sup>※2</sup> (mA) | V <sub>R</sub> (V) | T <sub>op</sub> (°C) | T <sub>st</sub> (°C) |
|--------------|---------|---------------------|------------------------------------|--------------------|----------------------|----------------------|
| CL-690S-WQ   | 72      | 20                  | 100                                | 5                  | -25~+80              | -30~+85              |
| CL-690S-2WQ  |         |                     |                                    |                    |                      |                      |
| CL-690S-3WQ  |         |                     |                                    |                    |                      |                      |

※1 1素子当たりの値です。The values are based on 1-die performance.

※2 I<sub>FP</sub>の条件はduty1/10、パルス巾30msecです。Condition for I<sub>FP</sub> is pulse of 1/10 duty and 30msec width.

## ●電氣的光学的特性 Electro-optical Characteristics

(Ta 25°C)

| Parameter                                      | Symbol         | Conditions           | MIN | TYP               | MAX  | Unit |                            |
|--|----------------|----------------------|-----|-------------------|------|------|----------------------------|
| 順電圧<br>Forward Voltage <sup>※1</sup>           | V <sub>F</sub> | I <sub>F</sub> =20mA | -   | 3.2               | 3.6  | V    |                            |
|  |                |                      |     |                   |      |      | CL-690S-WQ                 |
|  |                |                      |     |                   |      |      | CL-690S-2WQ<br>CL-690S-3WQ |
| 逆電流<br>Reverse Current <sup>※1</sup>           | I <sub>R</sub> | V <sub>R</sub> =5V   | -   | -                 | 100  | μA   |                            |
| 光度<br>Luminous Intensity <sup>※2</sup>         | I <sub>v</sub> | I <sub>F</sub> =20mA | -   | 2.8               | 5.6  | cd   |                            |
|  |                |                      |     | 5.0               | 10.1 |      |                            |
|  |                |                      |     | 7.2               | 14.3 |      |                            |
| 色度座標<br>Chromaticity coordinates <sup>※3</sup> | x, y           | I <sub>F</sub> =20mA |     | x(±0.02) y(±0.02) |      |      |                            |
|  |                |                      |     | a                 | 0.27 |      | 0.22                       |
|  |                |                      |     | b                 | 0.27 |      | 0.29                       |
|  |                |                      |     | c                 | 0.35 |      | 0.40                       |
|  |                |                      |     | d                 | 0.35 |      | 0.33                       |

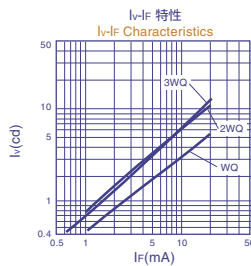
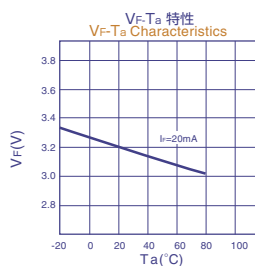
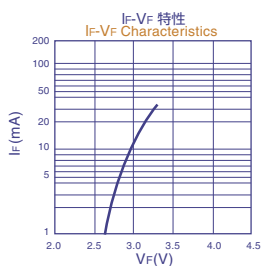
※1 1素子当たりの値です。The values are based on 1-die performance.

※2 NIST規格に準拠、各素子同時点灯時の値です。

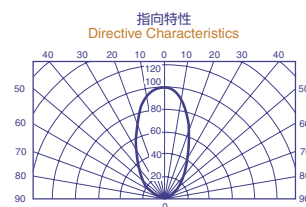
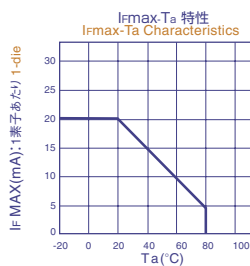
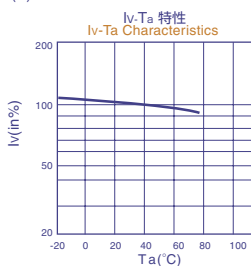
Compliant with NIST. The values are based on the condition that each die lights simultaneously.

※3 色度座標は、a, b, c, dに囲まれた範囲です。Chromaticity coordinates is surrounded with a, b, c, d.

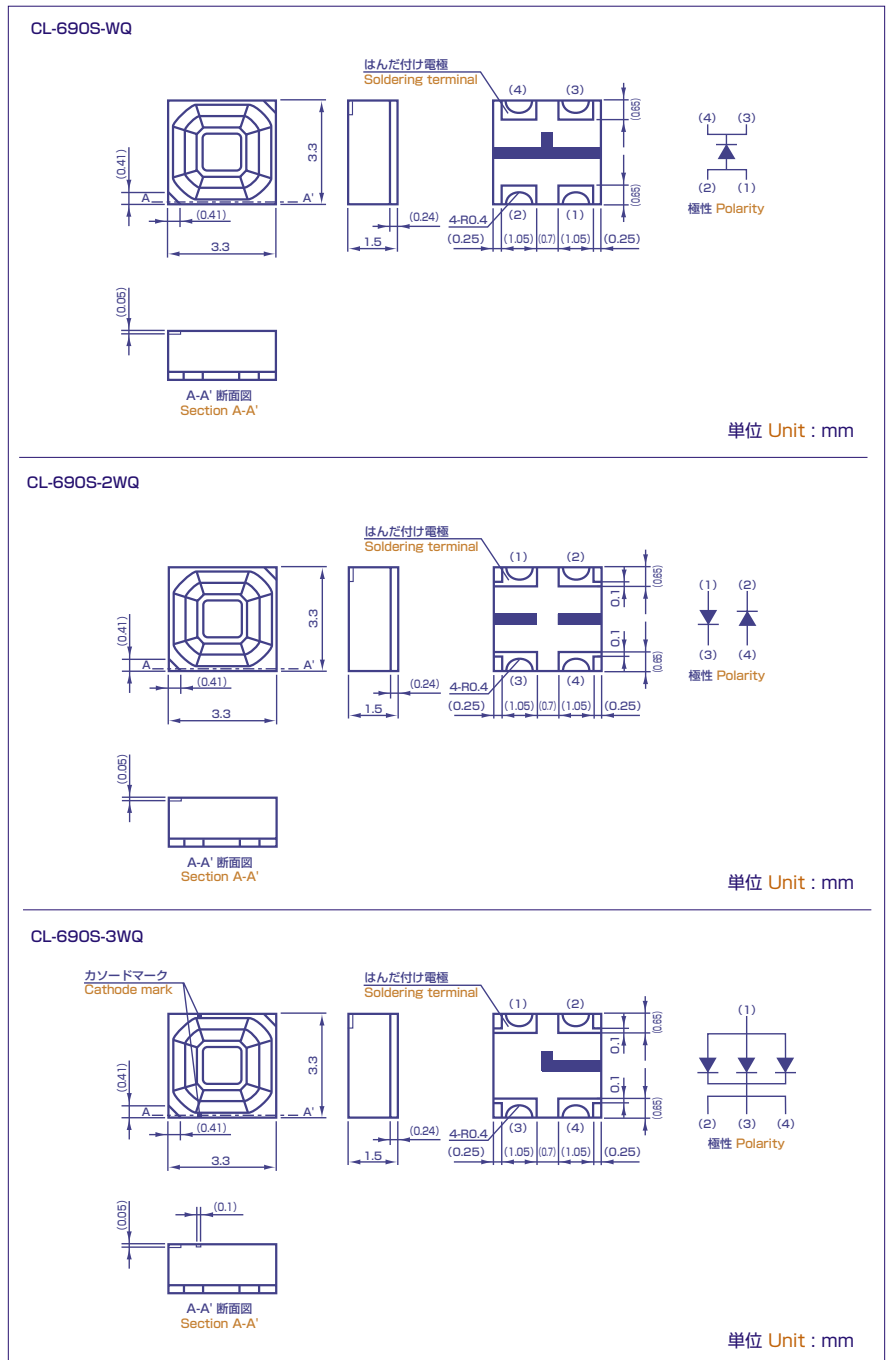
## ■ 諸特性 Characteristics



\*I<sub>v</sub> (cd)の数値は、2WQは「2素子合計」、3WQは「3素子合計」となります。  
I<sub>v</sub> (cd) for 2WQ is the 2-die total, that for 3WQ is the 3-die total.



●外形寸法図 Outline drawing



推奨はんだ付けパターン

The following soldering patterns are recommended for reflow-soldering:

CL-690S-WQ  
CL-690S-2WQ  
CL-690S-3WQ

