

# CL-195 Series

Mono-Color Upward-Lighting Type **CL-195 Series**



- 小型のチップLEDです。
- CL-190とコンパチです。

- Compact chip LED
- Compatible with the CL-190 series.

発光色のラインアップにつきましては、発注時にお問い合わせの上、ご確認ください。

Please contact us at the time of order for the lineup of luminescent colors.

## ●絶対最大定格 Absolute Maximum Rating (Ta 25°C)

| Product code                          | Pd (mW) | IF (mA) | IFP (mA) | VR (V) | Top (°C) | Tst (°C) |
|---------------------------------------|---------|---------|----------|--------|----------|----------|
| CL-195 (UR,HRを除く)<br>Except UR and HR | 50      | 20      | 100*1    | 5      | -25~+80  | -30~+85  |
| CL-195UR/HR                           | 78      | 30      |          |        |          |          |

\*1 IFPの条件はduty 1/10、パルス巾30msecです。

\*1 Condition for IFP is pulse of 1/10 duty and 30msec width.

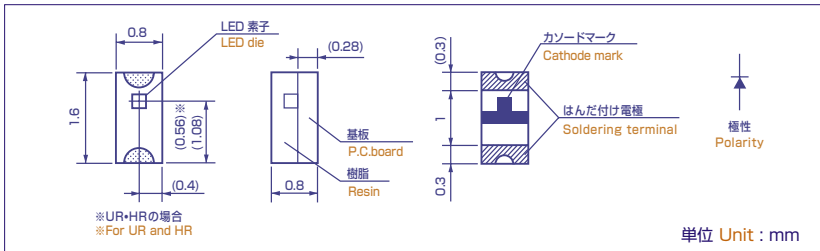
## ●電気的光学的特性 Electro-optical Characteristics (Ta 25°C)

| Product code | Lighting color          | VF      |         |         | λp typ (nm) | Δλ typ (nm) | IV*     |           |           |
|--------------|-------------------------|---------|---------|---------|-------------|-------------|---------|-----------|-----------|
|              |                         | IF (mA) | typ (V) | max (V) |             |             | IF (mA) | min (mcd) | typ (mcd) |
| CL-195R      | Red                     | 20      | 2.2     | 2.6     | 700         | 100         | 20      | 0.5       | 1.3       |
| CL-195D      | Orange                  | 20      | 2.2     | 2.6     | 605         | 40          | 20      | 2.4       | 7.1       |
| CL-195Y      | Yellow                  | 20      | 2.1     | 2.6     | 589         | 40          | 20      | 2.6       | 6.4       |
| CL-195YG     | Yellow green            | 20      | 2.2     | 2.6     | 570         | 30          | 20      | 5         | 18        |
| CL-195G      | Green                   | 20      | 2.2     | 2.6     | 567         | 26          | 20      | 2.5       | 10        |
| CL-195FG     | Fresh green             | 20      | 2.2     | 2.6     | 560         | 26          | 20      | 2.2       | 6.5       |
| CL-195PG     | Pure green              | 20      | 2.2     | 2.6     | 557         | 24          | 20      | 1         | 3         |
| CL-195SR     | Super brightness red    | 20      | 2       | 2.6     | 650         | 40          | 20      | 1.5       | 4.3       |
| CL-195SD     | Super brightness orange | 20      | 2       | 2.6     | 630         | 40          | 20      | 2         | 6.2       |
| CL-195UR     | Ultra brightness red    | 20      | 1.8     | 2.6     | 660         | 20          | 20      | 3.5       | 13        |
| CL-195HR     | High brightness red     | 20      | 1.8     | 2.6     | 660         | 20          | 20      | 5         | 23        |

※NIST規格に準拠

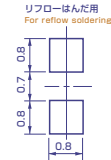
※Per NIST standards

## ●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:



## ●諸特性 Characteristics

