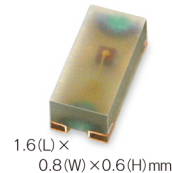


Precautions for use of Compact Chip LED products

- (1) When adopting the product for mass production, please exchange formal specifications with us.
- (2) Do not reverse-engineer the product including disassemble or analyze without our approval.
- (3) The product is not in conformity to IATF16949 or intended to be used for in-vehicle application. The product is not designed or manufactured to be used for special application (e.g. trains, ships, airplanes, spaceships, submarine repeaters, atomic energy control systems, traffic equipment, combustion equipment, medical devices, and safety devices). We will not guarantee any application suitability for goods like those described above that require special quality and reliability. In cases where the product is used in special applications and it causes extensive property damage, threatens human life or damages the human body, we will not be held liable.
- (4) The specification and appearance of the product may change without notice for improvement, etc.
- (5) This technical information and data is provided for users as is, and we do not guarantee that it is free from errors or defect in technical information and data, or this technical information and data conform to special applications, or this technical information and data does not infringe any rights of the user or third parties other than the user, or any other contents (including changes in contents for improvement of the specification and appearance of the product) thereof.

CL-196 Series



特徴 Features

- 1. 単色発光LED
Mono-color lighting LED
- 2. 上面発光、小型
Upward-lighting, compact type

●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-196YG | 50 | 20 | 100* | 4 | -25~+80 | -30~+85 |
| CL-196TLY | 78 | 30 | 100* | 4 | -25~+80 | -30~+85 |
| CL-196D | 50 | 20 | 100* | 4 | -25~+80 | -30~+85 |
| CL-196HR | 78 | 30 | 100* | 4 | -25~+80 | -30~+85 |

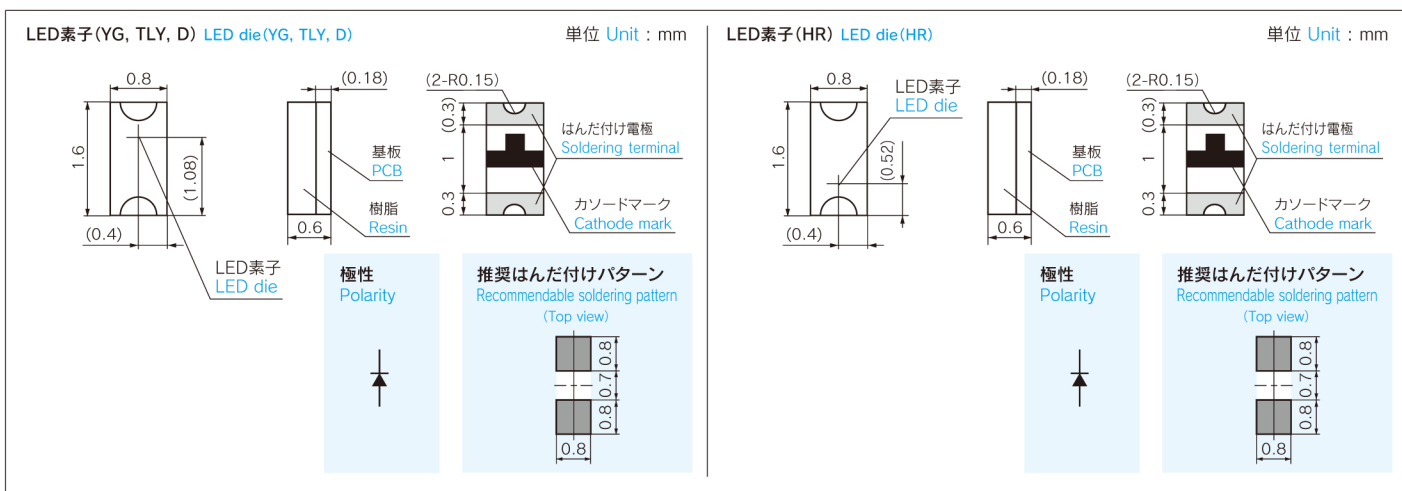
* IFPの条件はduty 1/10、パルス幅0.1msecです。
* Conditions for IFP are pulse of 1/10 duty and 0.1msec width.

●電気的光学的特性 Electrical and Optical Characteristics (Ta 25°C)

| Product code | VF | | | λd typ (nm) | λp typ (nm) | Iv* | | |
|--------------|------------|------------|------------|-------------------|-------------------|------------|--------------|--------------|
| | IF (mA) | typ (V) | max (V) | | | IF (mA) | min (mcd) | typ (mcd) |
| CL-196YG | 20 | 2.2 | 2.63 | 570 | — | 20 | 5.0 | 18 |
| CL-196TLY | 20 | 2.1 | 2.63 | — | — | 20 | 16 | 60 |
| CL-196D | 20 | 2.2 | 2.63 | 605 | — | 20 | 2.4 | 7.1 |
| CL-196HR | 20 | 1.8 | 2.63 | — | 655 | 20 | 5.0 | 23 |

* NIST規格に準拠 * Compliant with NIST standards

●外形寸法図 Outline drawing



包装数量: 5,000個/1リール(φ 180mm) Loaded quantity: 5,000pcs./1 reel(φ 180mm)