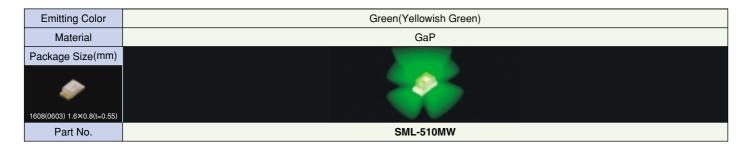
# 0603<1.6×0.8 t=0.55mm> Standard Type



## SML-510 Series



#### ■ Absolute Maximum Ratings (Ta=25°C)

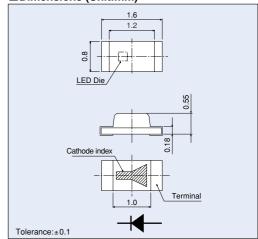
|   | Part No.  | Emitting color             | Power dissipation P <sub>D</sub> (mW) | Forward<br>current<br>IF<br>(mA) | Peak<br>forward<br>current<br>*IFP<br>(mA) | Reverse<br>voltage<br>V <sub>R</sub><br>(V) |            | Storage<br>temperature<br>T <sub>stg</sub><br>(°C) |
|---|-----------|----------------------------|---------------------------------------|----------------------------------|--|---|------------|--|
| ١ | SML-510MW | Green<br>(Yellowish Green) | 55                                    | 20                               | 60   | 4   | -30 to +85 | -40 to +85   |

**<sup>\*</sup>**:Duty  $\leq 1/5$ , pulse width  $\leq 1$ ms.

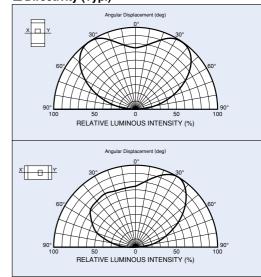
## ■ Electrical Optical Characteristics (Ta=25°C)

| Part No.  | Resin Color | Forward<br>voltage<br>V <sub>F</sub> |            | Reverse<br>current<br>In |           | Light wavelength Peak Half-wave λρ Δλ |              |            | Brightness<br>lv |            |            |
|-----------|-------------|--------------------------------------|------------|--------------------------|-----------|---------------------------------------|--------------|------------|------------------|------------|------------|
|           |             | Typ.                                 | lF<br>(mA) | Max.<br>(μA)             | Vr<br>(V) | Typ.<br>(nm)                          | Typ.<br>(nm) | lF<br>(mA) | Min.<br>(mcd)    | Typ. (mcd) | lF<br>(mA) |
| SML-510MW | Milky White | 2.2                                  | 20         | 100                      | 4         | 570                                   | 40           | 20         | 3.6              | 16         | 20         |

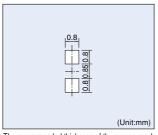
#### ■ Dimensions (Unit:mm)



## ■ Directivity (Typ.)

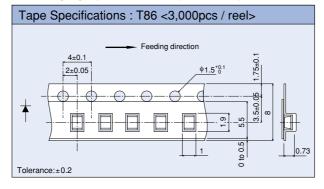


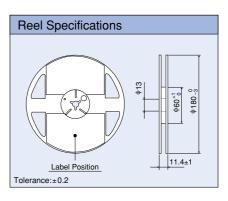
#### ■Recommended Pad Layout



The recommended thickness of the screen mask for soldering is between 100 and  $150\mu m$ . The hole size of the screen mask should be same as the recommended land pattern or smaller.

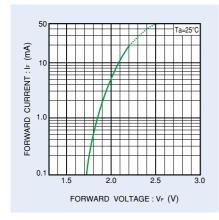
## ■ Packaging Specifications (Unit: mm)



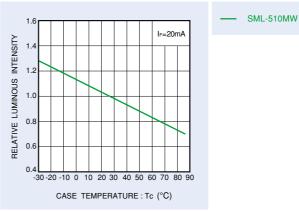


#### **■**Electrical Characteristic Curves

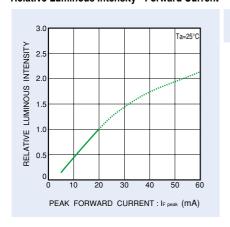
## **Forward Current - Forward Voltage**



**Relative Luminous Intensity - Case Temperature** 

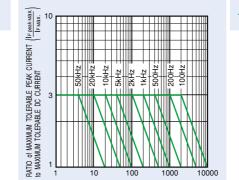


## Relative Luminous Intensity - Forward Current



SML-510MW

SML-510MW



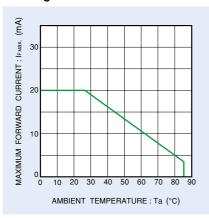
PULSE DURATION: Tw (µs)

Ratio of Maximum Tolerable Peak Current - Pulse Duration

SML-510MW

10000

## Derating



SML-510MW

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Appendix1-Rev1.1