

0805<2.0×1.25 t=0.8mm> Standard Type

SML-210 Series

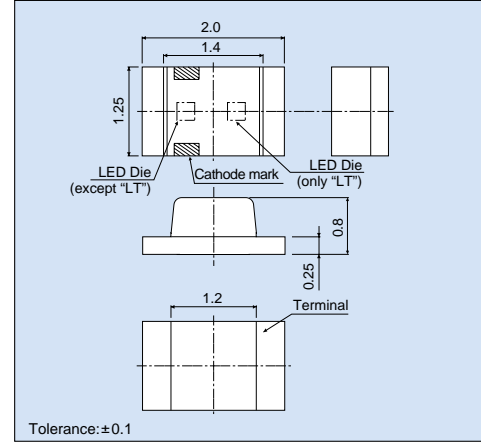
| | | | | | |
|------------------|------------|------------------------|-----------|--------------|-----------|
| Emitting Color | Pure Green | Green(Yellowish Green) | Yellow | Orange | Red |
| Material | GaP | | | GaAsP on GaP | |
| Package Size(mm) | | | | | |
| Part No. | SML-210PT | SML-210MT | SML-210YT | SML-210DT | SML-210VT |

Absolute Maximum Ratings (Ta=25°C)

| Part No. | Emitting color | Power dissipation Pd (mW) | Forward current IF (mA) | Peak forward current *IFP (mA) | Reverse voltage VR (V) | Operating temperature Topr (°C) | Storage temperature Tstg (°C) |
|-----------|-------------------------|---------------------------|-------------------------|--------------------------------|------------------------|---------------------------------|-------------------------------|
| SML-210PT | Pure Green | | | | | | |
| SML-210MT | Green (Yellowish Green) | | | | | | |
| SML-210YT | Yellow | 70 | 25 | 60 | 4 | -30 to +85 | -40 to +85 |
| SML-210DT | Orange | | | | | | |
| SML-210VT | Red | | | | | | |

*: Duty ≤ 1/5, pulse width ≤ 1ms.

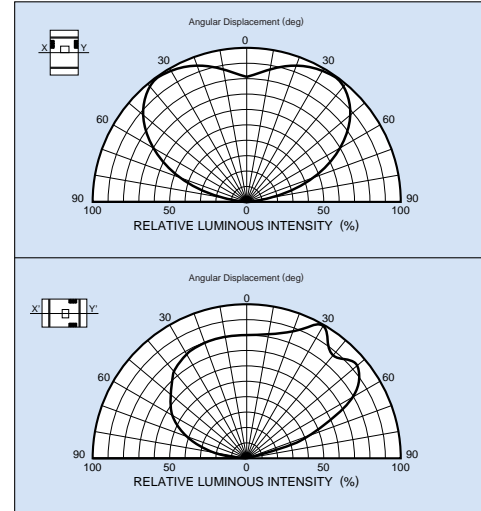
Dimensions (Unit:mm)



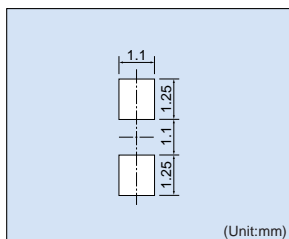
Electrical Optical Characteristics (Ta=25°C)

| Part No. | Resin Color | Forward voltage VF | | Reverse current IR | | Light wavelength | | | Brightness Iv | | |
|-----------|-----------------------|--------------------|---------|--------------------|--------|------------------|-------------------|---------|---------------|------------|---------|
| | | Typ. (V) | IF (mA) | Max. (μA) | VR (V) | Peak λp (nm) | Half-wave Δλ (nm) | IF (mA) | Min. (mcd) | Typ. (mcd) | IF (mA) |
| SML-210PT | Transparent Colorless | 2.2 | 20 | 100 | 4 | 555 | | | 1.4 | 4 | 20 |
| SML-210MT | | | | | | 570 | | | 3.6 | 16 | |
| SML-210YT | | 2.1 | | | | 585 | 40 | 20 | 2.2 | 6.3 | |
| SML-210DT | | 2.0 | | | | 610 | | | | | |
| SML-210VT | | | | | | 650 | | | 1.4 | 4 | |

Directivity (Typ.)

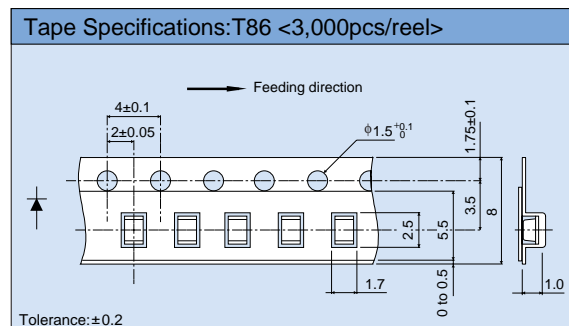


Recommended Pad Layout

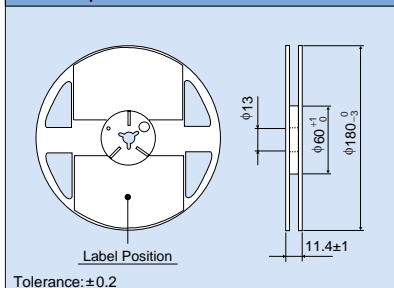


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

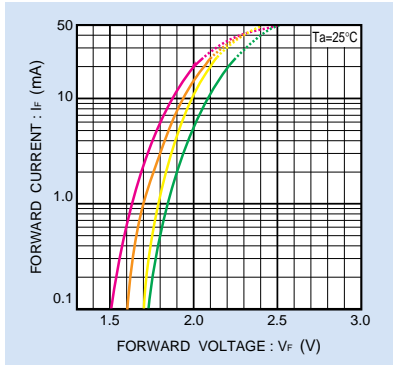


Reel Specifications



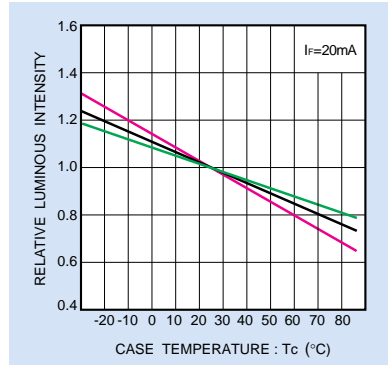
Electrical Characteristic Curves

Forward Current - Forward Voltage



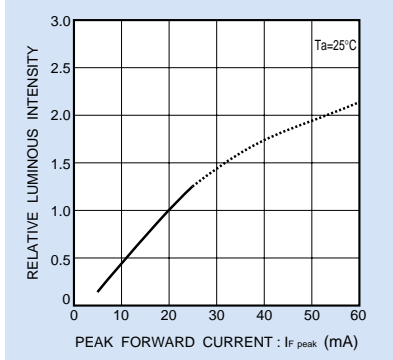
— SML-210PT
 — SML-210MT
 — SML-210YT
 — SML-210DT
 — SML-210VT

Relative Luminous Intensity - Case Temperature



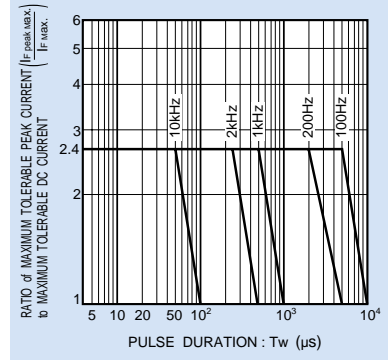
— SML-210PT
 — SML-210MT
 — SML-210YT
 — SML-210DT
 — SML-210VT

Relative Luminous Intensity - Forward Current



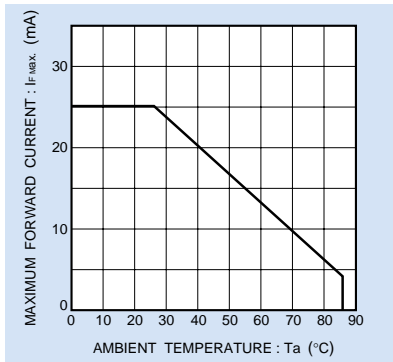
— SML-210PT
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Ratio of Maximum Tolerable Peak Current - Pulse Duration



— SML-210PT
 — SML-210MT
 — SML-210YT
 — SML-210DT
 — SML-210VT

Derating



— SML-210PT
 — SML-210MT
 — SML-210YT
 — SML-210DT
 — SML-210VT

Notes

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