

Tri-Color Top View 0604 <1.5×1.0 t=0.2mm> High Brightness Type

SMLP36 Series (under development)

PICOLED™-RGB

Target Spec.

| Emitting Color | Part No. | Blue | Green | Red |
|------------------|-------------|---------------------------|-------|-----------------|
| Material | | InGaN on SiC | | AlGaInP on GaAs |
| Package Size(mm) | SMLP36RGB1W | | | |
| | | 1510(0604) 1.5×1.0(t=0.2) | | |

Absolute Maximum Ratings (Ta=25°C)

| Part No. | Emitting color | Power dissipation P _D (mW) | Forward current I _F (mA) ^{*1} | Peak forward current I _{FP} (mA) ^{*2} | Reverse voltage V _R (V) | Operating temperature T _{opr} (°C) | Storage temperature T _{stg} (°C) |
|----------|----------------|---------------------------------------|---|---|------------------------------------|---|---|
| SMLP36 | Blue | 64 | 20 | 100 | 5 | -30 to +85 | -40 to +100 |
| | Green | | | | | | |
| | Red | | | | | | |

*1: The above absolute maximum ratings are valid for the case of lighting a single color. When lighting two colors at the same time, each of the figures in the absolute maximum ratings should be reduced down to 50% of it. When lighting three colors, it will be reduced down to 30% of it. (DC drive)

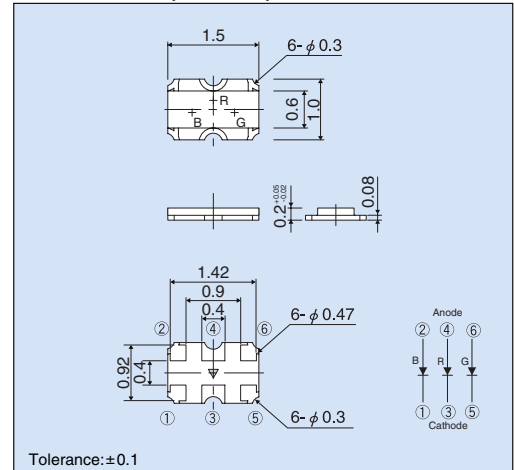
*2: Conditions of I_{FP} : Pulse width ≤ 1ms Duty ≤ 1/120

Electrical Optical Characteristics (Ta=25°C)

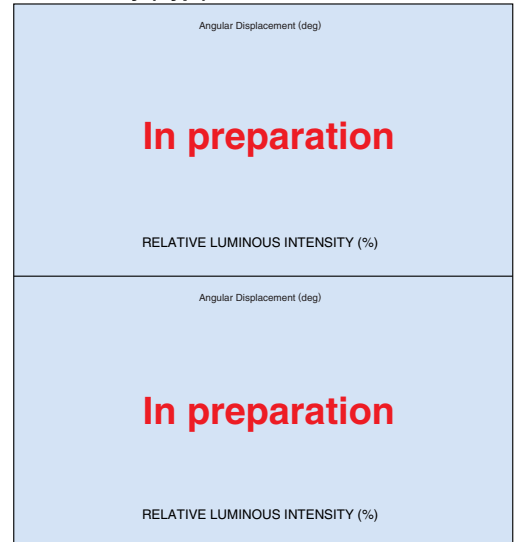
| Part No. | Resin Color | Forward voltage V _F | | Reverse current I _R | | Light wavelength Dominant λ _D ^{*3} | | Brightness I _v | | |
|----------|-------------|--------------------------------|---------------------|--------------------------------|--------------------|--|---------------------|---------------------------|-------------|---------------------|
| | | Typ. (V) | I _F (mA) | Max. (μA) | V _R (V) | Typ. (nm) | I _F (mA) | Min. (mcd) | Typ. (mcd) | I _F (mA) |
| SMLP36 | Milky White | 3.0 (3.2) | 5 (20) | 100 | 5 | 470 | 5 | 9.0 (28) | 18 (50) | 5 (20) |
| | | 3.1 (3.3) | | | | 527 | | 36 (110) | 71 (200) | |
| | | 1.9 (2.2) | | | | 624 | | 14 (56) | 28 (100) | |

*3: Measurement tolerance : ±2nm

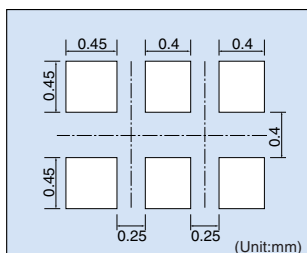
Dimensions (Unit:mm)



Directivity (Typ.)

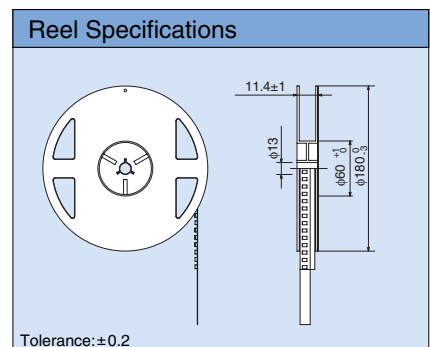
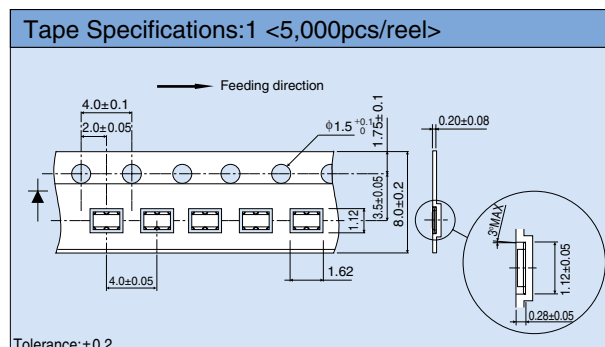


Recommended Pad Layout



The recommended thickness of the screen mask for soldering is between 80 and 130μm. The hole size of the screen mask should be the same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)



Notes

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