Winger Electronics WERPW07-C2M PLCC6 SMD LED



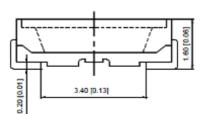


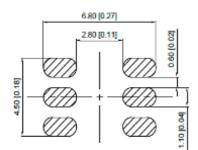


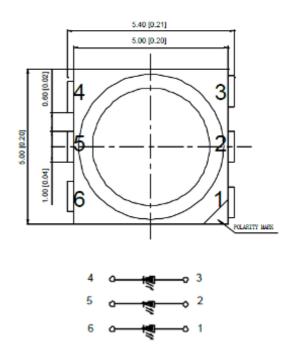
Dimension figure

Description

- PLCC6 SMD LED
- Emitting Color: White







Absolute Maximum Ratings

| ltem | Symbol | Absolute Maximum Rating | Unit |
|----------------------------|------------------------|-------------------------|------|
| Forward Current | IF | 3 * 26 | mA |
| Peak Forward Current * | I _{FP} | 3 * 100 | mA |
| Reverse Voltage | V _R | 5 | V |
| Power Dissipation | Po | 256 | mW |
| Operating Temperature | T _{OPR} | -40 ~ +85 | °C |
| Storage Temperature | T _{stg} | -40 ~ +100 | °C |
| Lead Soldering Temperature | T _{SOL} | Max. 5 sec @ 260 | °C |

^{*}I_{FP} Conditions: 1/10 Duty Cycle, 0.1ms Puls Width

Typical Optical/Electrical Characteristics

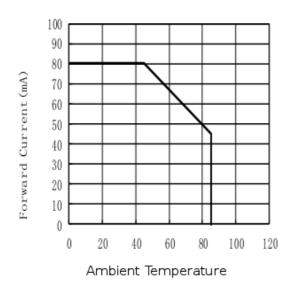
| Item | Symbol | Condition | Min. | Тур. | Max. | Unit |
|--------------------------------|---------------------|--------------------|------|------|--------|------|
| Forward Voltage | VF | | 2,6 | 3 | 3,2 | V |
| 50% Power Angle | | I _F = | - | 120 | - | deg |
| Luminous Intensity | Iv | 3 * 20mA | 1,9 | - | 2,5 | lm |
| Dominant Wavelength | λ_{D} | | - | - | - | nm |
| Color Temperature | Тс | | 6000 | 6500 | 7000 | К |
| Color Rendering Index | CRI | | 80 | - | - | Ra |
| Recommended Forward Current | I _{F(rec)} | | - | - | 3 * 20 | mA |
| Reverse Current | I _R | V _R =5V | - | - | 10 | μA |

Notes:

- 1. It's strongly recommended to limit die temperature to 55°C
- 2. Absolute maximum ratings Ta=25°C
- 3. Measurement Tolerances of Forward Voltage ±0.1V
- 4. Measurement Tolerances of peak wavelength ±2.0nm
- 5. Measurement Tolerances of luminous intensity ±15%
- 6. Measurement Tolerances of angle intensity $\pm 15\%$

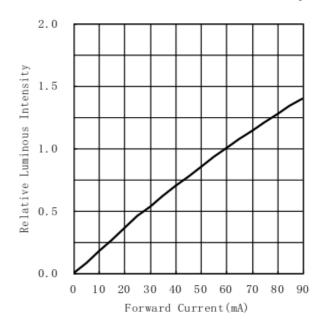
Typical electrical and optical characteristics

(valid for all 3 chips inside)



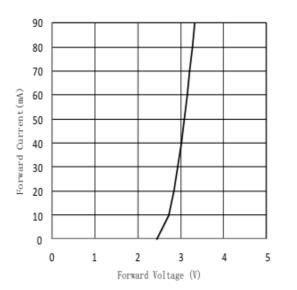
Forward Voltage VS. Forward Current

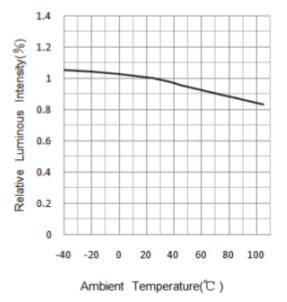
Forward current derating curve



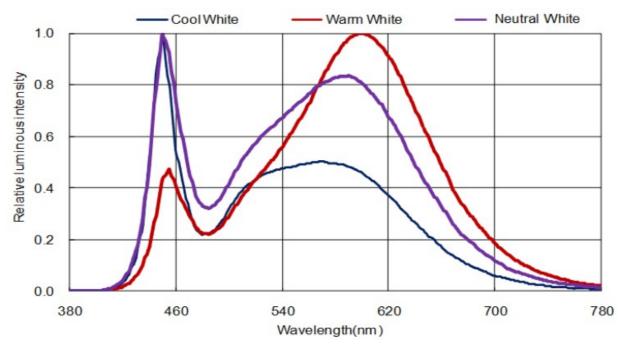
Forward current vs. Relative Intensity

Ambient Temperature VS. Relative Intensity

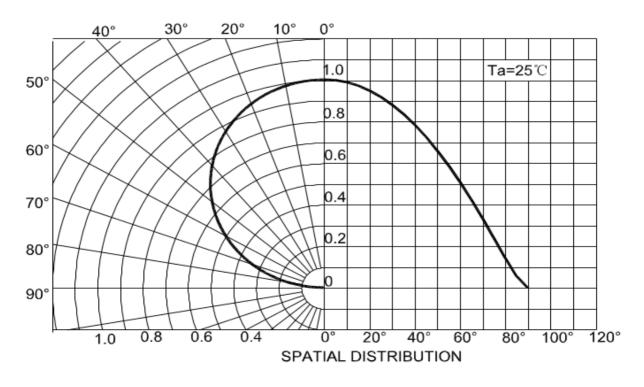




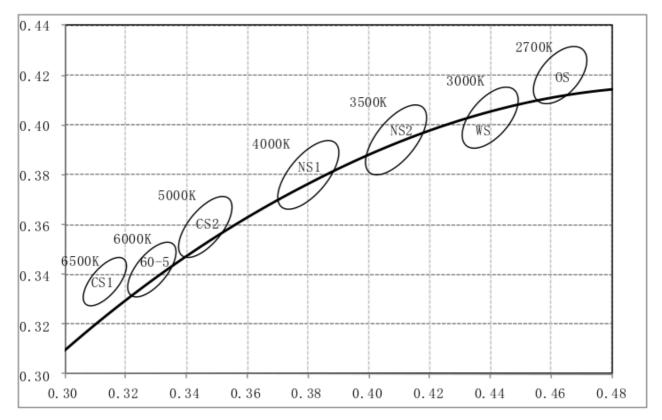
Relative spectral emission



Radiation diagram



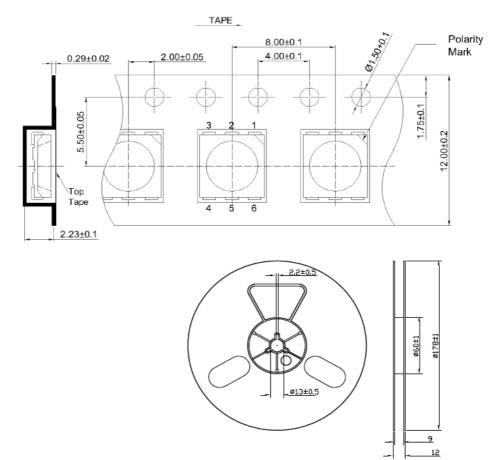
Chromaticity Coordinates



BIN Range of Chromaticity Coordinates

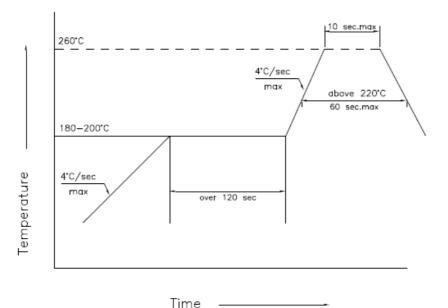
| Nominal CCT | Bin Code | Target Center Point (cx,cy) | Major Axis, a | Major Axis, b | Ellipse Rotation Angle, 0 | Color Space |
|----------------|----------|--------------------------------|------------------|------------------|-------------------------------------|-------------|
| 6500K | CS1 | 0.313,0.337 | 0.01115 | 0.00475 | 58.23° | Sing 5-step |
| 6000K | 60-5 | 0.3220,0.3365 | 0.01179 | 0.00504 | 59.21 | Sing 5-step |
| 5000K | CS2 | 0.346,0.359 | 0.01370 | 0.00590 | 59.37° | Sing 5-step |
| 4040K | NS1 | 0.380,0.380 | 0.01565 | 0.00670 | 54.00° | Sing 5-step |
| 3450K | NS2 | 0.409,0.394 | 0.01585 | 0.00695 | 52.58° | Sing 5-step |
| 2940K | WS | 0.440,0.403 | 0.01390 | 0.00680 | 53.10° | Sing 5-step |
| 2720K | OS | 0.463,0.420 | 0.01290 | 0.00685 | 53.17° | Sing 5-step |

Tape reel dimensions



Loaded QTY 1000pcs per reel

Reflow soldering profile



Manually soldering

Max. 300°C @ 3secs.

Storage

- 1. Do not open moisture proof bag before ready to use
- 2. Before opening the package, LEDs should be kept at 30°C or less and 80% RH or less.
- 3. After opening the package, LEDs should be kept at 30°C or less and 60% RH or less.
- 4. The LEDs should be used within one year.
- 5. The LEDs should be used within 72 hours after opening the package (MSL-Level 4)
- 6. If the silica gel bag has fabled away or storage time has exceeded, baking treatment should be performed. Conditions: 70±3°C for 24 hours.

Warranty

(1) Perform an acceptance inspection on arrival of the goods. Return the defectives if any stipulating the disqualification and quantity.

(2) Embedding the LEDs into the application and the verification of life and other qualities in practical use shall be executed by user.

(3) Do not use the LEDs for the applications that require the higher reliability and security and that may endanger life and health by the breakdown and the malfunction. Seller shall not bear any responsibility or liability with respect to any claims and damages caused by user's usage of the LEDs without following our intended purpose or any written consent.

(4) Seller shall not bear responsibility for any damages or defects caused by improper operation at the current in excess of the absolute maximum ratings that are not covered by warranty.