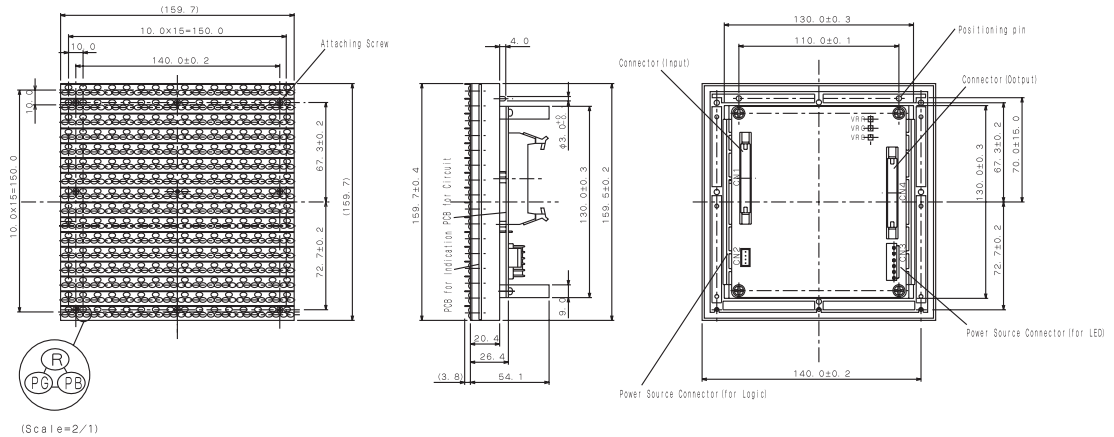


# FULL COLOR PANEL DISPLAY UNITS

160 × 160 mm

10 mm 16 × 16 Dots LNP728021

Outline Drawing



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

| Item                          | Symbol           | Ratings                       | Unit |
|-------------------------------|------------------|-------------------------------|------|
| Supply Voltage for Logic      | V <sub>CC</sub>  | - 0.3 ~ + 5.25                | V    |
| Supply Voltage for LED        | V <sub>LED</sub> | R: + 3.2 PG: + 5.0 PB: + 5.0  | V    |
| Input Voltage                 | V <sub>in</sub>  | - 0.3 ~ V <sub>CC</sub> + 0.3 | V    |
| Operating Ambient Temperature | T <sub>opr</sub> | - 20 ~ + 45                   | °C   |
| Storage Temperature           | T <sub>stg</sub> | - 30 ~ + 80                   | °C   |

## Main Specifications (Ta = 25°C)

| Item                                | Symbol         | Ratings                                 | Unit              |   |
|-------------------------------------|----------------|---|-------------------|---|
| Display Colors                      |                | Full Color (Red, Green, Blue)           |                   |   |
| Display Surface Size                |                | 160 × 160                               | mm                |   |
| Dot Total Number                    |                | 256 ( 10 16 × 16)                       |                   |   |
| Dot Structure                       |                | R:1 PG:1 PB:1                           |                   |   |
| Dots Pitch                          |                | 10.0                                    | mm                |   |
| Brightness(when lighting all lamps) | B              | (W):5000                                | cd/m <sup>2</sup> |   |
| Area Gradation                      |                | R:PG:PB<br>256 gradation for each color |                   |   |
| Peak Emission Wavelength (Typ)      | λ <sub>p</sub> | R:620 PG:525 PB:468                     | nm                |   |
| Viewing Angle (50% Luminous)        | 2θ 1/2         | Level 120, Up10, Down30                 | °                 |   |
| Operating Method                    |                | 1/4 (Duty )<br>Dynamic lighting         |                   |   |
| Date Forward Frequency              |                | 8                                       | MHz               |   |
| Clock Frequency                     |                | 500                                     | KHz               |   |
| for Logic                           | Supply Voltage | V <sub>CC</sub>                         | 5.0 ± 0.25        | V |
|                                     | Supply Current | I <sub>CC</sub>                         | Max 0.5           | A |
| for LED                             | Supply Voltage | V <sub>R</sub>                          | 3.0               | V |
|                                     |                | V <sub>PG</sub> ·V <sub>PB</sub>        | 4.8               |   |
|                                     | Supply Current | I <sub>R</sub>                          | Max 3.4           | A |
| I <sub>PG</sub>                     |                | Max 2.5                                 |                   |   |
| I <sub>PB</sub>                     |                | Max 1.0                                 |                   |   |
| Mass                                |                | 610                                     | g                 |   |