

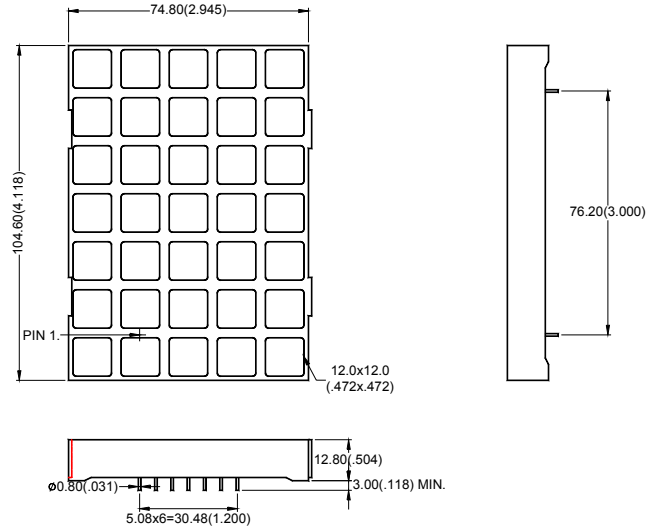
● Features :

1. 4.118 inch (104.6mm) matrix height.
2. Square size 12.0 × 12.0mm.
3. Low power requirement.
4. Excellent characters appearance.
5. Solid state reliability.
6. Multiplex drive , column cathode com. and row anode com.
7. Single color available.
8. Categorized for luminous intensity.
9. Stackable vertically and horizontally.

● Description :

1. The BM-41257ND is a 104.6mm (4.118") matrix height 5×7 square matrix display.
2. This product use green chips, which are made from GaP on GaP substrate.
3. This product have a black face and white squares.
4. This product doesn't contain restriction substance, comply ROHS standard.

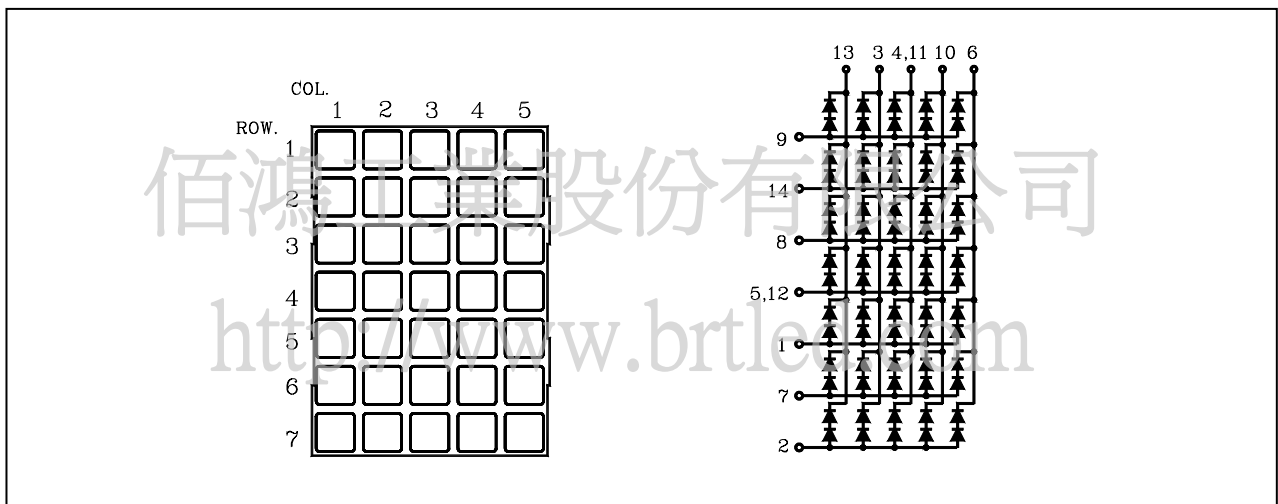
● Package Dimensions :



Notes:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(.01\text{'})$ unless otherwise specified.
3. Specifications are subject to change without notice.

● Internal Circuit Diagram :



● **Absolute Maximum Ratings(Ta=25°C)**

| Parameter | Symbol | Rating | Unit |
|--|--------------------------------------|---------------------|------|
| Power Dissipation Per Square | Pd | 160 | mW |
| Forward Current Per Square | I _F | 30 | mA |
| Peak Forward Current Per Square | I _{FP} (Duty 1/10, 1KHZ) | 150 | mA |
| Reverse Voltage Per Square | V _R | 5 | V |
| Operating Temperature | Topr | -40°C~80°C | - |
| Storage Temperature | Tstg | -40°C~85°C | - |
| Soldering Temperature (1/16" From Body) | Tsol | 260°C For 5 Seconds | - |

● **Electrical And Optical Characteristics(Ta=25°C)**

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|-------------------------------|----------------|----------------------|------|------|------|------|
| Forward Voltage Per Square | V _F | I _F =10mA | - | 4.2 | 5.0 | V |
| Luminous Intensity Per Square | I _v | I _F =10mA | - | 15.0 | - | mcd |
| Reverse Current Per Square | I _R | V _R =5V | - | - | 100 | μA |
| Peak Wave Length | λ _p | I _F =10mA | - | 568 | - | nm |
| Dominant Wave Length | λ _d | I _F =10mA | 569 | - | 574 | nm |
| Spectral Line Half-width | Δλ | I _F =10mA | - | 30 | - | nm |

<http://www.brtled.com>

● Typical Electro-Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Relative Radiant Intensity VS. Wavelength

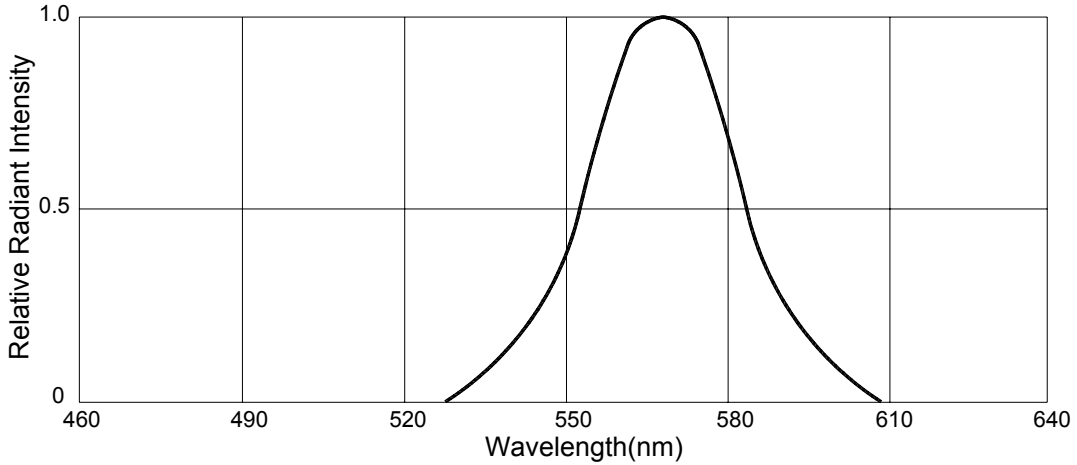


Fig.2 Forward Current VS. Forward Voltage

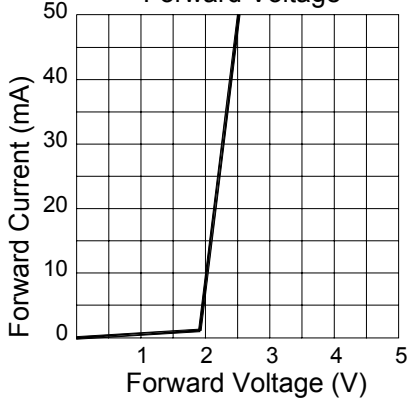


Fig.3 Relative Luminous Intensity VS. Ambient Temperature

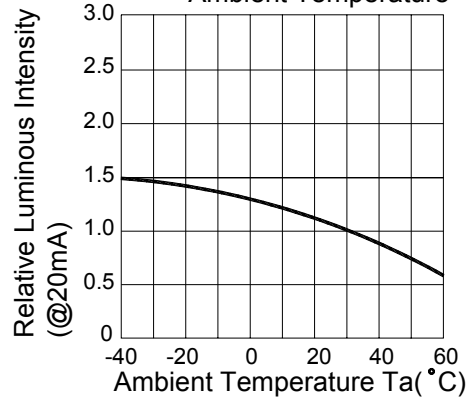


Fig.4 Relative Luminous Intensity VS. Forward Current

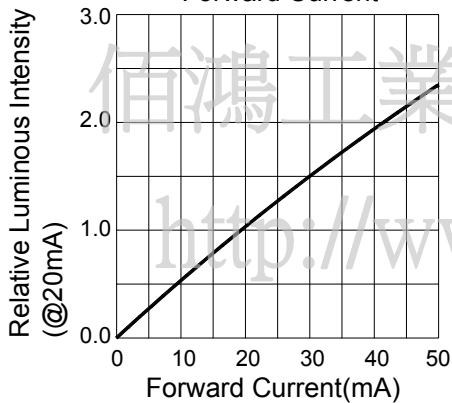


Fig.5 Forward Current Derating Curve VS. Ambient Temperature

