

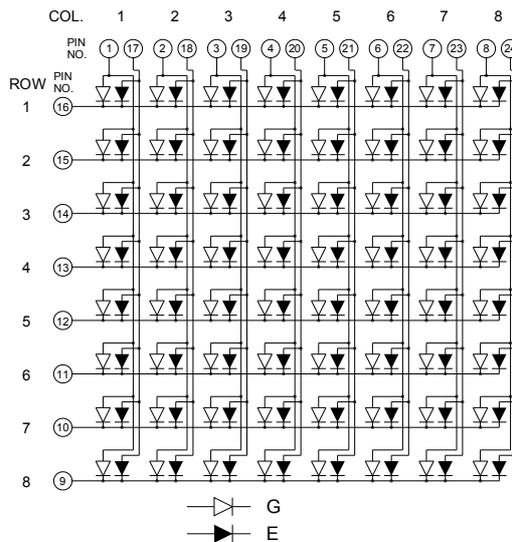
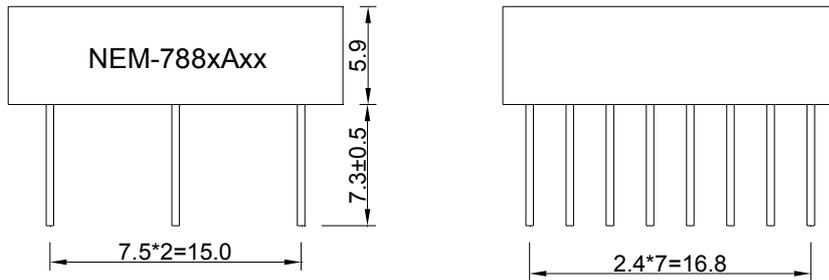
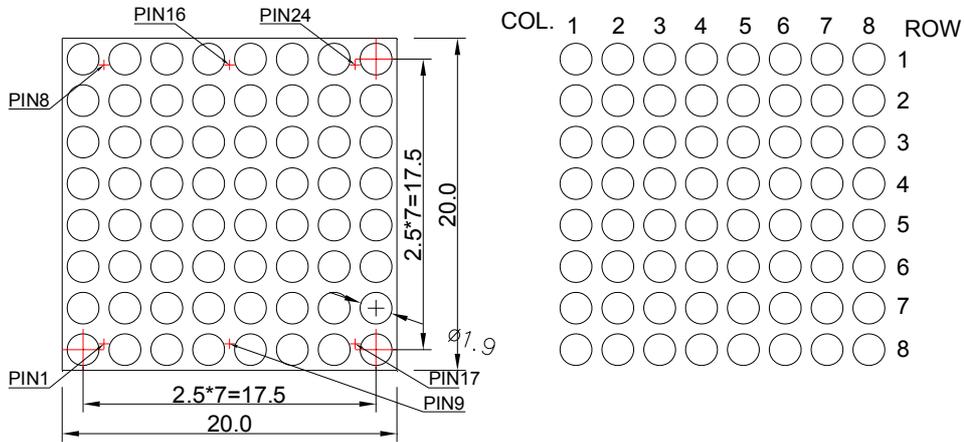
## Features:

- Large emitting dot 1.9mm diameter.
- Low current operation.
- Easy mounting on P.C. boards or sockets.
- Wide viewing angle.
- Solid state reliability.
- Mechanically rugged.
- Pb free.
- RoHS compliant.

## Descriptions:

- The NEM-788xAxx series is a large emitting area (1.9mm diameter) LED sources configured in a 64 dot 8\*8 matrix array.
- These devices are made with black surface and white segments.
- The Super Orange Red source color Devices are made with AlGaInP Orange Red Light Emitting Diode  
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode

## Package Dimensions & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters( inches), Tolerance is  $\pm 0.25$  (0.01") unless otherwise noted.
2. Specifications are subject to change without notice.

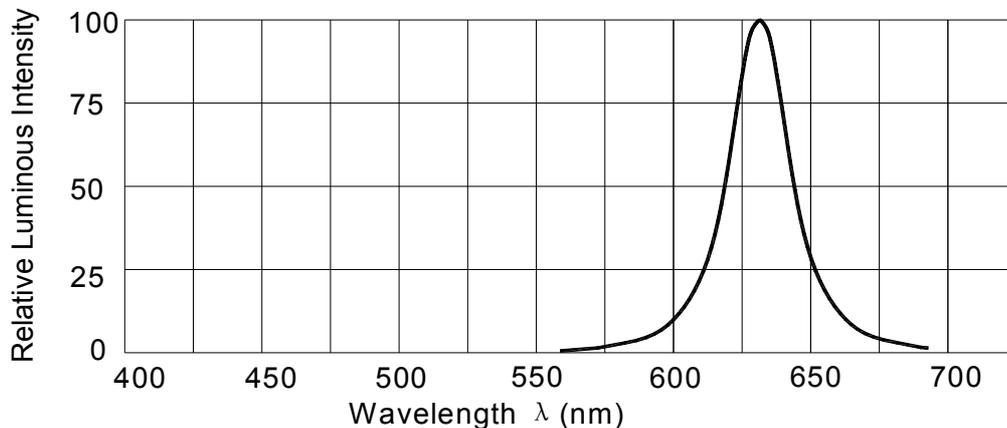
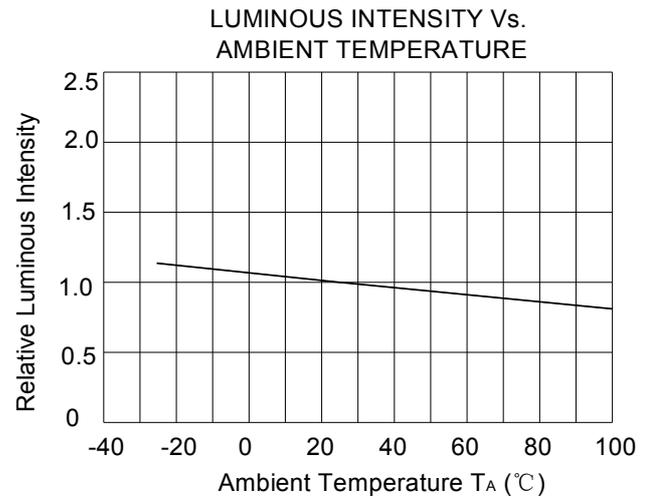
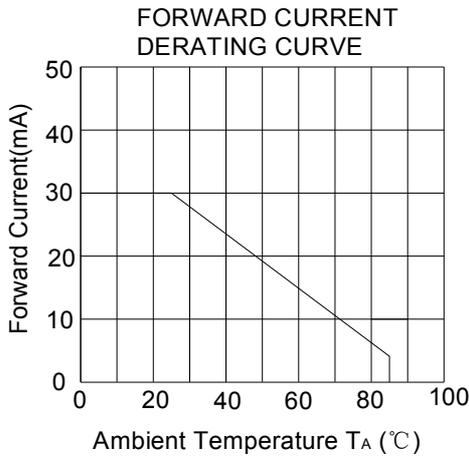
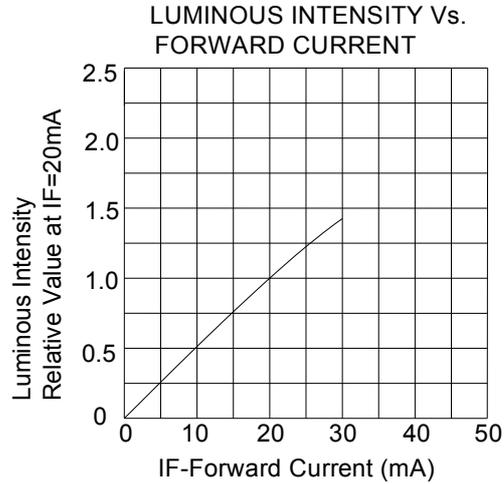
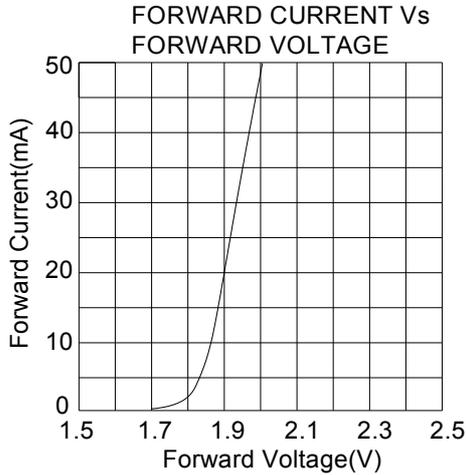
**Absolute maximum ratings (Ta = 25°C)**

| Parameter             | Symbol |                                 | Value |      | Unit |
|-----------------------|--------|---------------------------------|-------|------|------|
|                       |        |                                 | Min.  | Max. |      |
| Reverse Voltage       | VR     | ----                            | ----  | 5    | V    |
| Forward Current       | IF     | ----                            | ----  | 25   | mA   |
| Power Dissipation     | Pd     | ----                            | ----  | 60   | mW   |
| Pulse Current         | Ipeak  | Duty=0.1mS,<br>1kHz             | ----  | 80   | mA   |
| Operating Temperature | Topr   | ----                            | -25   | +85  | °C   |
| Storage Temperature   | Tstr   | ----                            | -30   | +85  | °C   |
| Solder Temperature    | Tsol   | 1/16inch below<br>Seating plane | 260/3 |      | °C/s |

**Electrical and optical characteristics (Ta = 25°C)**

| Parameter                | Symbol | Color | Test Condition | Values |      |      | Unit |
|--------------------------|--------|-------|----------------|--------|------|------|------|
|                          |        |       |                | Min.   | Typ. | Max. |      |
| Forward Voltage          | VF     | E     | IF=20mA        | ----   | 2.0  | 2.4  | V    |
|                          |        | G     |                | ----   | 2.3  | 2.6  |      |
| Reverse Current          | IR     |       | VR=5V          | ----   | ---- | 30   | μA   |
| Dominate Wavelength      | λd     | E     | IF=20mA        | ----   | 625  | ---- | nm   |
|                          |        | G     |                | ----   | 570  | ---- |      |
| Peak Wavelength          | λp     | E     | IF=20mA        | ----   | 635  | ---- | nm   |
|                          |        | G     |                | ----   | 568  | ---- |      |
| Spectral Line half-width | Δλ     | E     | IF=20mA        | ----   | 20   | ---- | nm   |
|                          |        | G     |                | ----   | 30   | ---- |      |
| Luminous Intensity       | Iv     | E     | IF=10mA        | ----   | 5000 | ---- | ucd  |
|                          |        | G     |                | ----   | 2500 | ---- |      |

Typical electrical/optical characteristic curves:



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