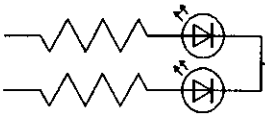
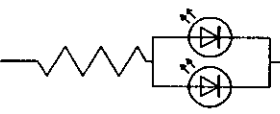
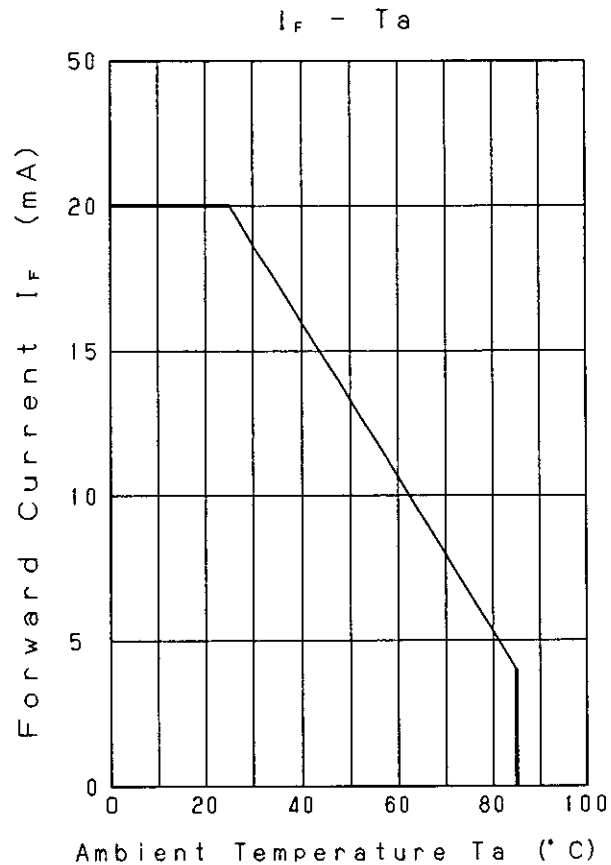
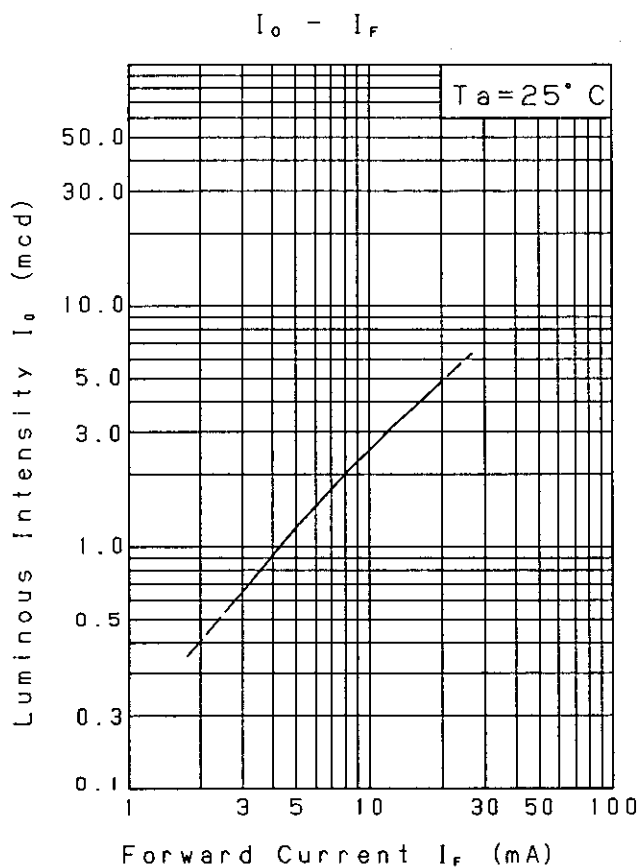
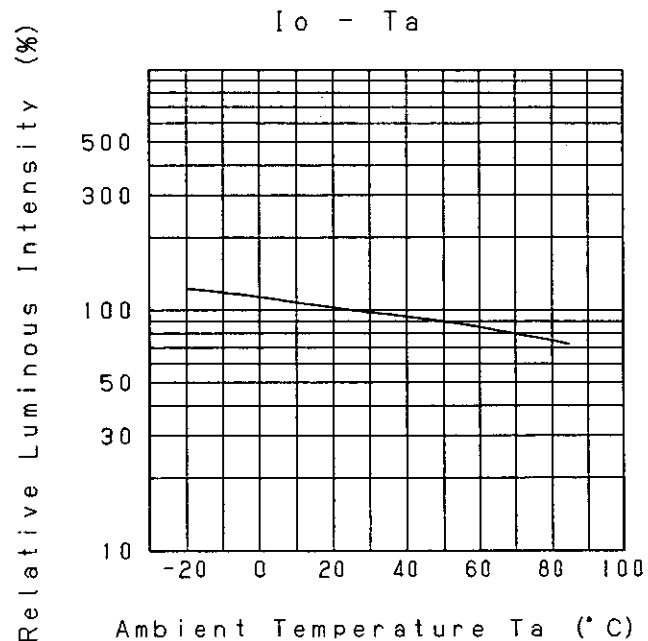
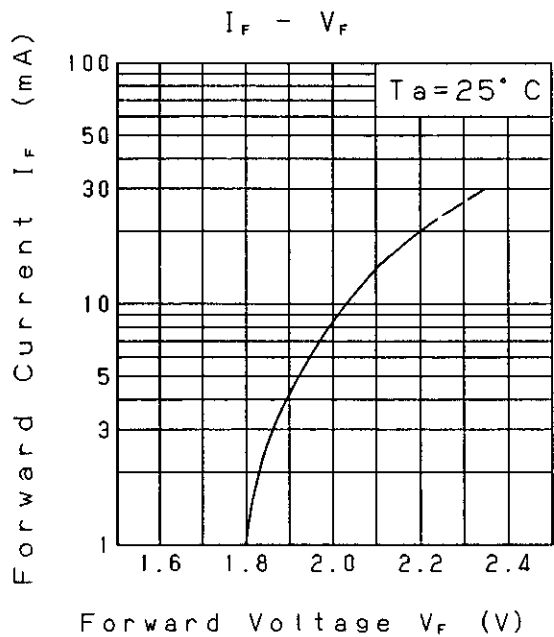
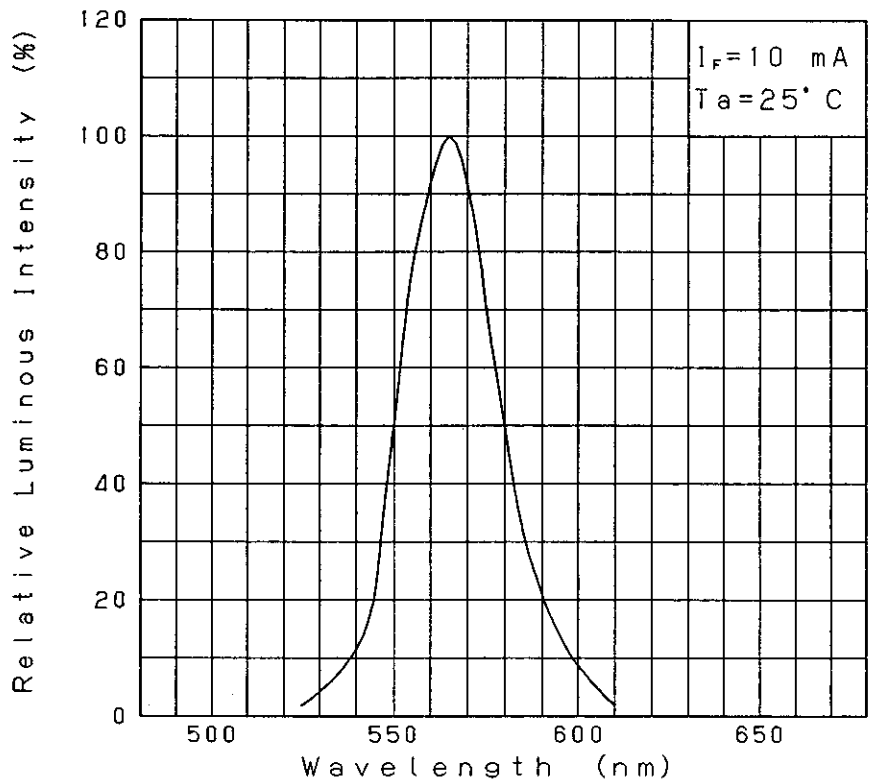


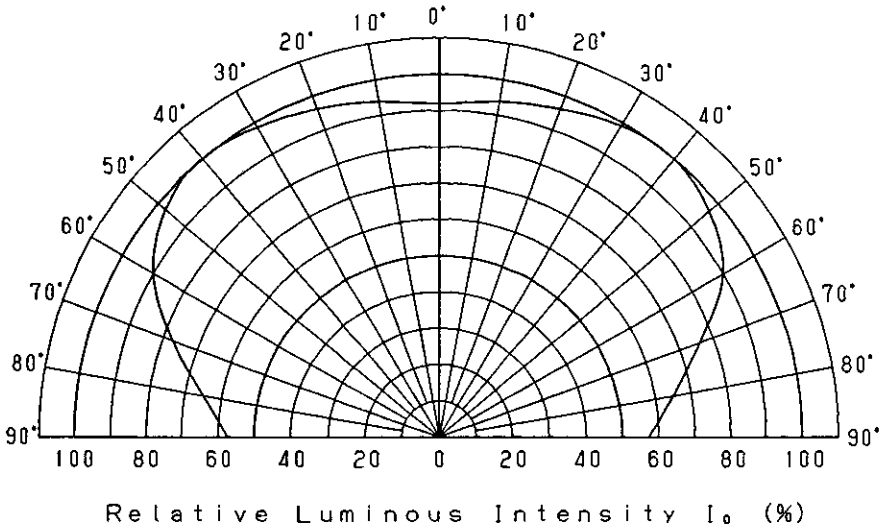
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                |                             |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------|-----------------------------|-------------------------------------------------------------------------------------|------------------|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Checked | Designed       | DEVELOPMENT SPECIFICATION   |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | <i>K. Oono</i> | P/N: LN1371GTRP             |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| T Y P E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |                | Green Light Emitting Diode  |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| APPLICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |                | Indicators                  |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |                | GaP                         |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| OUTLINE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |                | Attached                    |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| ABSOLUTE<br>MAXIMUM<br>RATINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                | P                           | ※ I <sub>FP</sub>                                                                   | I <sub>FDC</sub> | V <sub>R</sub> | Topr    | Tstg                                                                                                                                                         |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                | 60                          | 60                                                                                  | 20               | 4              | -25~+85 | -30~+100                                                                                                                                                     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                | mW                          | mA                                                                                  | mA               | V              | °C      | °C                                                                                                                                                           |  |  |
| CONDITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |                | Ta = 25 ± 3 °C              |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| Test Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |                |                             |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
| Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         | Symbol         | Condition                   | Typ                                                                                 | Limit            |                | Unit    |                                                                                                                                                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                |                             |                                                                                     | Min              | Max            |         |                                                                                                                                                              |  |  |
| Forward Voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         | V <sub>F</sub> | I <sub>F</sub> = 10 mA      | 2.03                                                                                |                  | 2.6            | V       |                                                                                                                                                              |  |  |
| Reverse Leakage Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         | I <sub>R</sub> | V <sub>R</sub> = 4 V        |                                                                                     |                  | 10             | μA      |                                                                                                                                                              |  |  |
| Luminous Intensity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         | I <sub>O</sub> | I <sub>F</sub> = 10 mA · DC | 2.6                                                                                 | 0.9              |                | mcd     |                                                                                                                                                              |  |  |
| Peak Emission Wavelength                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         | λ <sub>p</sub> | I <sub>F</sub> = 10 mA · DC | 565                                                                                 |                  |                | nm      |                                                                                                                                                              |  |  |
| Spectral Line Half Width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         | Δλ             | I <sub>F</sub> = 10 mA · DC | 30                                                                                  |                  |                | nm      |                                                                                                                                                              |  |  |
| <p>※ · The Condition of I<sub>FP</sub> is duty 10 %, Pulse width 1 ms</p> <p>· Please contact the Panasonic local office if you design at low current (below 1mA DC) or pulse current operation and have any questions.</p> <p>NOTE</p> <ol style="list-style-type: none"> <li>1. Compositions of the lead ... Cu/Ni/Au plating</li> <li>2. Soldering conditions.<br/>Refer to Handling note.</li> <li>3. Care should be taken that soldering is done within 3-days after opening the dry package and reel.</li> <li>4. Package: Light green diffusion type.</li> <li>5. Circuit to operate LED.</li> </ol> |         |                |                             |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |                |                             |  |                  |                |         | <p>(A) Recommended circuit.</p> <p>(B) The difference of brightness between the LED could be found due to the V<sub>F</sub> characteristics of each LED.</p> |  |  |
| Oct. 27. 2001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |                |                             |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                |                             |                                                                                     |                  |                |         |                                                                                                                                                              |  |  |



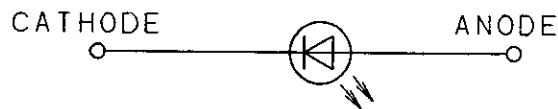
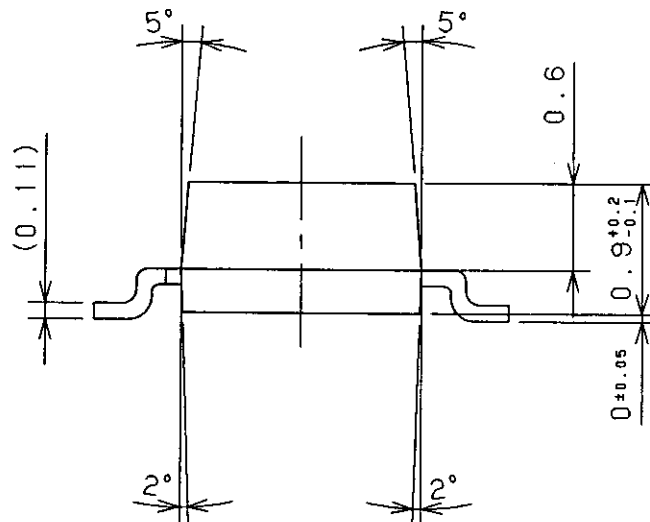
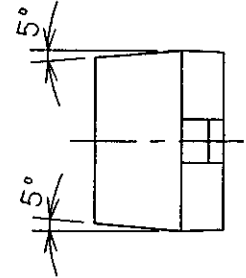
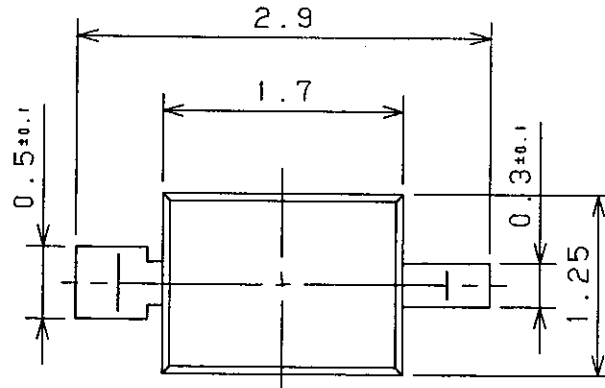
Relative Luminous Intensity  
Wavelength Characteristics



Derective Characteristics



|          |         |                  |                                                           |  |  |  |  |
|----------|---------|------------------|-----------------------------------------------------------|--|--|--|--|
| Approved | Checked | Designed         | DEVELOPMENT SPECIFICATION<br>(OUTLINE)<br>P/N: LN1371GTRP |  |  |  |  |
|          |         | <i>K. Oomura</i> |                                                           |  |  |  |  |



(NOTE)

1. Unit: mm
2. Tolerance unless specified is  $\pm 0.2$ .
3. Measurement of the Package doesn't include gete projection.
4. Corner of the package is R 0.2max.
5. Projection's tolerance of the package is R 0.2max.

Oct. 27. 2001