



Through Hole Lamp Product Data Sheet

LTL-14CHJ

Spec No.: DS-20-92-0018

Effective Date: 05/25/2000

Revision: -

LITE-ON DCC

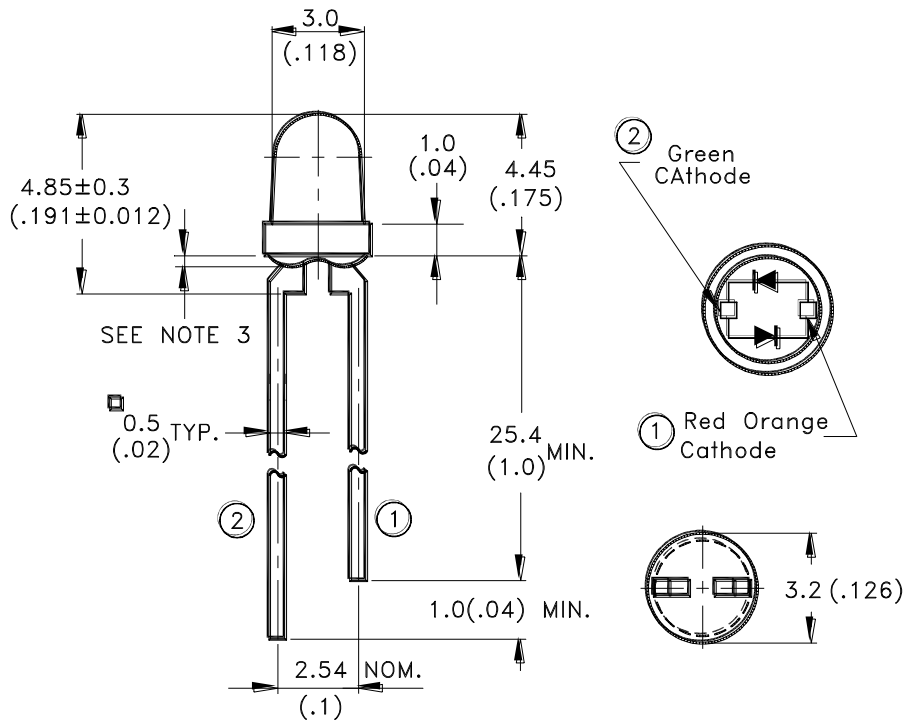
RELEASE

BNS-OD-FC001/A4

Features

- * Red Orange and Green chips are matched for uniform light output.
- * T-1 type package.
- * Long life solid state reliability.
- * Low power consumption.
- * I.C. compatible.

Package Dimensions



| Part No. | Lens | Source Color |
|-----------|----------------|--------------------|
| LTL-14CHJ | White Diffused | Red Orange / Green |

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm(.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



Absolute Maximum Ratings at TA=25°C

| Parameter | Red Orange | Green | Unit |
|--|---------------------|-------|-------|
| Power Dissipation | 100 | 100 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 120 | 120 | mA |
| Continuous Forward Current | 30 | 30 | mA |
| Derating Linear From 50°C | 0.4 | 0.4 | mA/°C |
| Operating Temperature Range | -55°C to + 100°C | | |
| Storage Temperature Range | -55°C to + 100°C | | |
| Lead Soldering Temperature [1.6mm(.063") From Body] | 260°C for 5 Seconds | | |



Electrical / Optical Characteristics at TA=25°C

| Parameter | Symbol | Color | Min. | Typ. | Max. | Unit | Test Condition |
|--------------------------|-------------------|---------------------|------------|------------|------------|------|-----------------------------------|
| Luminous Intensity | I _v | Red Orange Green | 2.2 2.2 | 4.8 4.8 | | mcd | I _F = 20mA Note 1,4 |
| Viewing Angle | 2θ _{1/2} | Red Orange Green | | 200 | | deg | Note 2 (Fig.6) |
| Peak Emission Wavelength | λ _p | Red Orange Green | | 630 565 | | nm | Measurement @Peak (Fig.1) |
| Dominant Wavelength | λ _d | Red Orange Green | | 621 569 | | nm | Note 3 |
| Spectral Line Half-Width | Δλ | Red Orange Green | | 40 30 | | nm | |
| Forward Voltage | V _F | Red Orange Green | | 2.0 2.1 | 2.6 2.6 | V | I _F = 20mA |
| Reverse Current | I _R | Red Orange Green | | | 100 | μA | V _R = 5V |
| Capacitance | C | Red Orange Green | | 20 35 | | pF | V _F = 0, f = 1MHz |

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve.

2. θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

3. The dominant wavelength, λ_d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4. The I_v guarantee should be added ±15% .

5. Reverse current is controlled by dice source.

Property of Lite-On Only

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

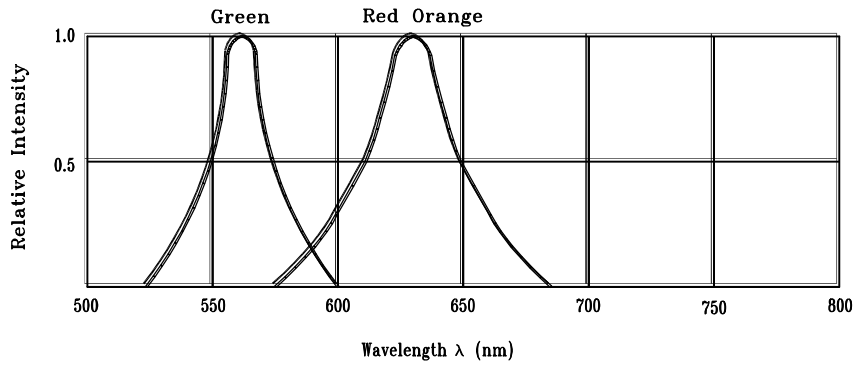


Fig.1 Relative Intensity vs. Wavelength

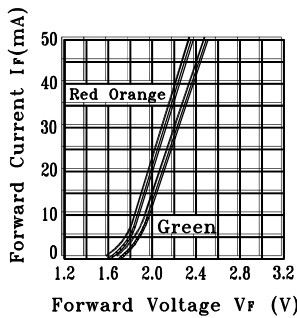


Fig.2 Forward Current vs. Forward Voltage

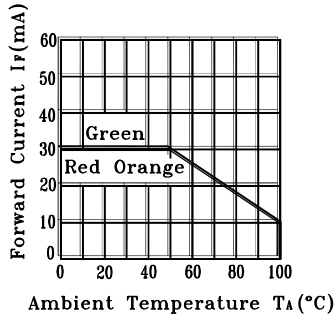


Fig.3 Forward Current Derating Curve

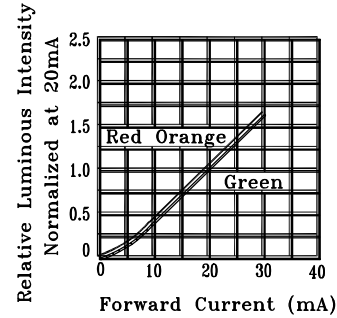


Fig.4 Relative Luminous Intensity vs. Forward Current

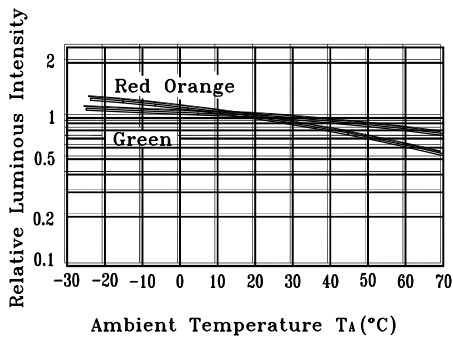


Fig.5 Luminous Intensity vs. Ambient Temperature

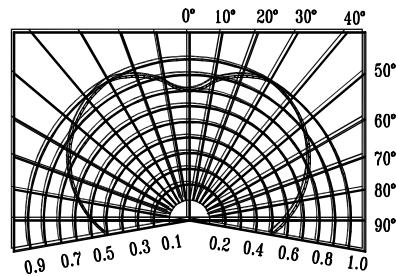


Fig.6 Spatial Distribution