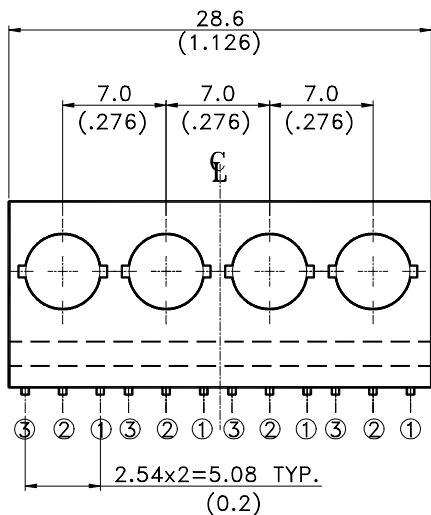


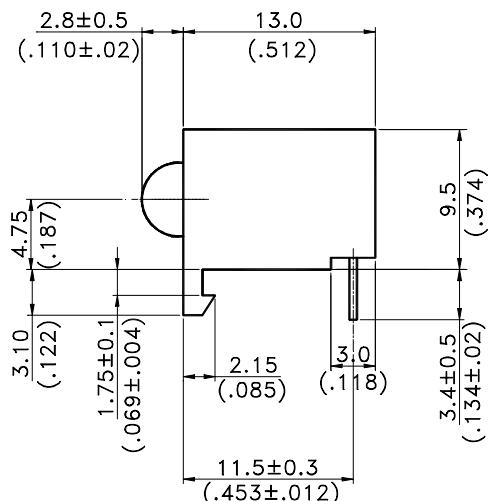
Features

- * Red and Green chips are matched for uniform light output.
- * T-1 3/4 type package.
- * Long life solid state reliability.
- * Low power consumption.

Package Dimensions



| 30EFJNF | |
|---------|------------------|
| (1) | Green Anode |
| (2) | Common Cathode |
| (3) | Bright Red Anode |



| Part No. LTL- | Lens | Source Color |
|------------------|----------------|------------------|
| 30EFJNF | White Diffused | Green/Bright Red |

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}(.010")$ unless otherwise noted.
3. The holder color is black.
4. The LED lamps are LTL-30EFJNF.



L I T E - O N E L E C T R O N I C S , I N C .

P r o p e r t y o f L i t e - O n O n l y

Absolute Maximum Ratings at Ta=25°C

| Parameter | Green | Bright Red | Unit |
|--|---------------------|------------|-------|
| Power Dissipation | 100 | 40 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 120 | 60 | mA |
| Continuous Forward Current | 30 | 15 | mA |
| Derating Linear From 50°C | 0.4 | 0.2 | mA/°C |
| Reverse Voltage | 5 | 5 | V |
| 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 | LTL- 30EFJNFH52 | Min. | Typ. | Max. | Unit | Test Condition |
|--------------------------|-------------------|---------------------|------|------------|------------|------|--------------------------------|
| Luminous Intensity | I _V | Bright Red Green | 2.5 | 8.7 | | mcd | I _F = 10mA Note 1,4 |
| | | | 8.7 | 29 | | | I _F = 10mA Note 1,4 |
| Viewing Angle | 2θ _{1/2} | Bright Red Green | | 30 | | deg | Note 2 (Fig.6) |
| Peak Emission Wavelength | λ _p | Bright Red Green | | 697 565 | | nm | Measurement @Peak (Fig.1) |
| Dominant Wavelength | λ _d | Bright Red Green | | 657 569 | | nm | Note 3 |
| Spectral Line Half-Width | Δ λ | Bright Red Green | | 90 30 | | nm | |
| Forward Voltage | V _F | Bright Red Green | | 2.1 2.1 | 2.6 2.6 | V | I _F = 20mA |
| Reverse Current | I _R | Bright Red Green | | | 100 | μA | V _R = 5V |
| | | | | | 100 | | V _R = 5V |
| Capacitance | C | Bright Red Green | | 55 35 | | pF | V _F = 0, f = 1MHz |

- NOTE:
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE 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. I_V needs ±15% additionary for guaranteed limits.

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

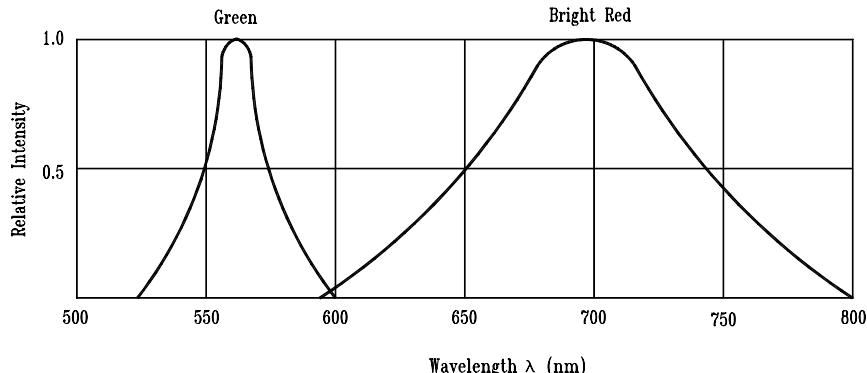


Fig.1 Relative Intensity vs. Wavelength

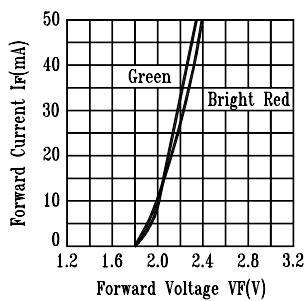


Fig.2 Forward Current vs. Forward Voltage

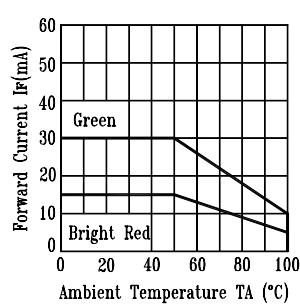


Fig.3 Forward Current Derating Curve

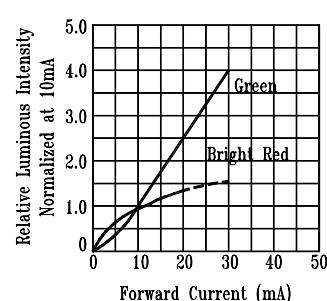


Fig.4 Relative Luminous Intensity vs. Forward Current

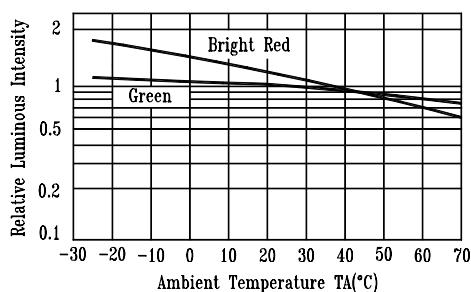


Fig.5 Luminous Intensity vs. Ambient Temperature

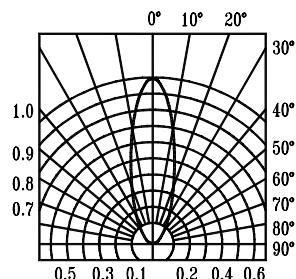


Fig.6 Spatial Distribution