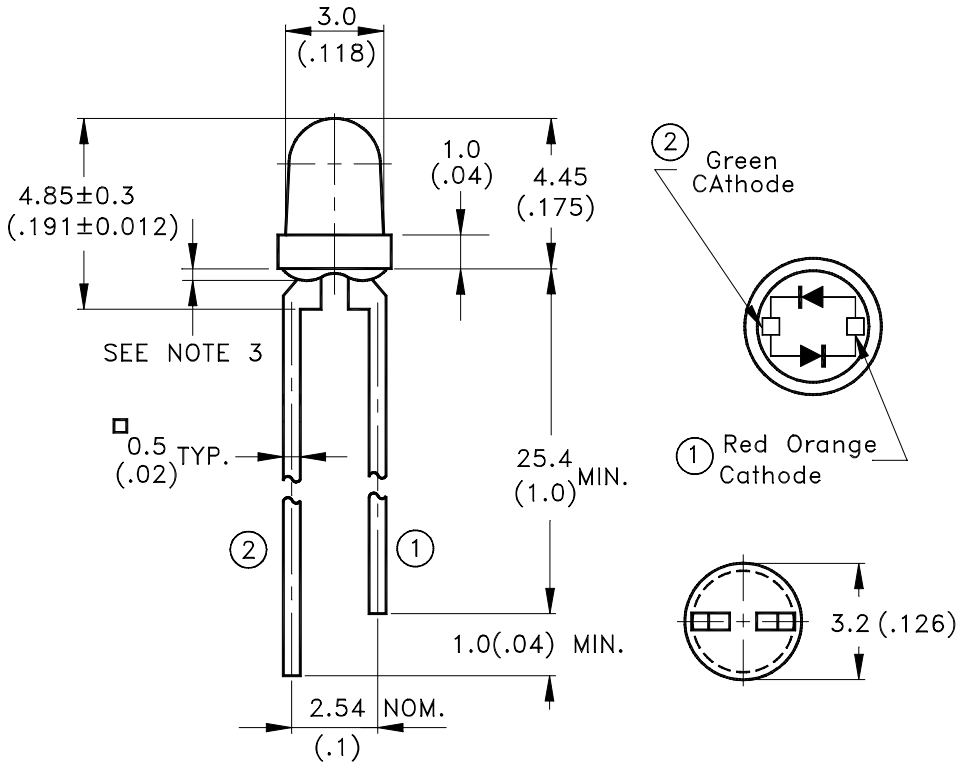
Features

* 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-041	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℃

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℃	0.4	0.4	mA/℃
Operating Temperature Range	-55℃ to + 100℃		
Storage Temperature Range	-55℃ to + 100℃		
Lead Soldering Temperature [1.6mm(.063") From Body]	260℃ for 5 Seconds		

Electrical / Optical Characteristics at T_A=25℃

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	$2\theta_{1/2}$	Red Orange Green		200		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Red Orange Green		630 565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	Red Orange Green		621 569		nm	Note 3
Spectral Line Half-Width	$\Delta\lambda$	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. $\theta_{1/2}$ 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 Iv guarantee should be added ± 15% .

5. Reverse current is controlled by dice source.

Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

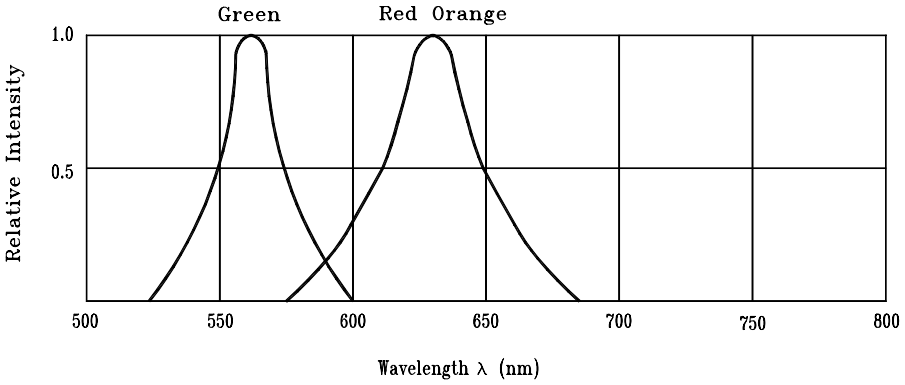


Fig.1 Relative Intensity vs. Wavelength

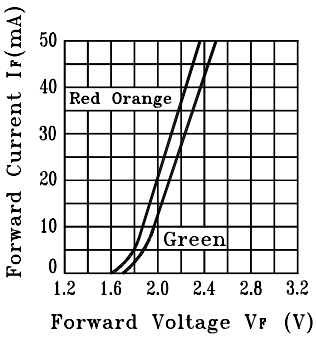


Fig.2 Forward Current vs. Forward Voltage

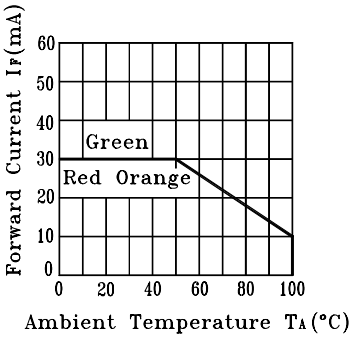


Fig.3 Forward Current Derating Curve

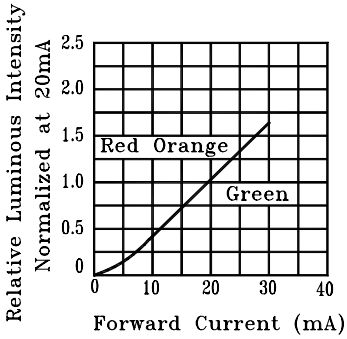


Fig.4 Relative Luminous Intensity vs. Forward Current

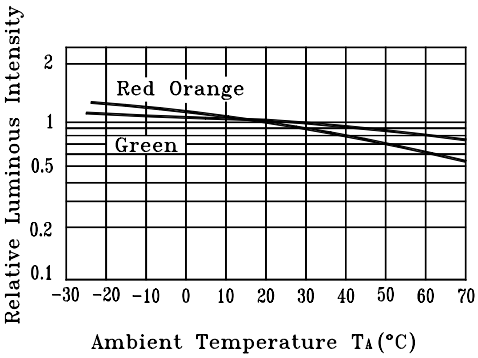


Fig.5 Luminous Intensity vs. Ambient Temperature

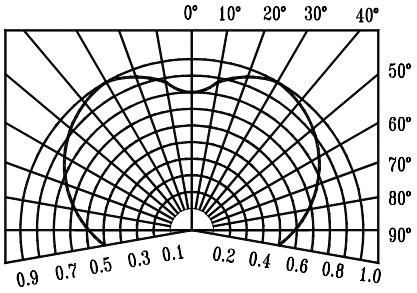
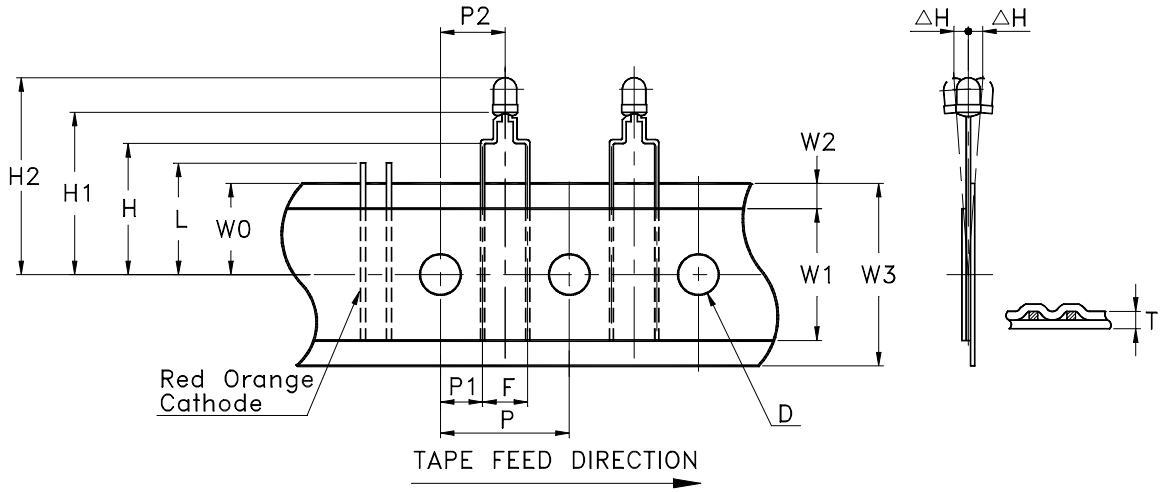


Fig.6 Spatial Distribution

Features

* Compatible with radial lead automatic insertion equipment.
* Most radial lead plastic lead lamps available packaged in tape and reel.
* 5mm (0.197") formed lead and 2.54mm (0.1") straight lead spacing available.
* Reel packaging simplifies handling and testing.

Package Dimensions



Item	Symbol	Specification			
		Minimum		Maximum	
		mm	inch	mm	inch
Tape Feed Hole Diameter	D	3.8	0.149	4.2	0.165
Component Lead Pitch	F	4.8	0.188	5.8	0.228
Front to Rear Deflection	△H	--	--	2.0	0.078
Height of Seating Plane	H	15.5	0.610	16.5	0.649
Feed Hole to Bottom of Component	H1	21.5	0.846	23.5	0.925
Feed Hole to Overall Component Height	H2	25.7	1.011	28.2	1.110
Lead Length After Component Height	L	W0		11.0	0.433
Feed Hole Pitch	P	12.4	0.488	13.0	0.511
Lead Location	P1	3.15	0.124	4.55	0.179
Center of Component Location	P2	5.05	0.198	7.65	0.301
Total Tape Thickness	T	--	--	0.90	0.035
Feed Hole Location	W0	8.5	0.334	9.75	0.384
Adhesive Tape Width	W1	12.5	0.492	13.5	0.531
Adhesive Tape Position	W2	0	0	3.0	0.118
Tape Width	W3	17.5	0.689	19.0	0.748