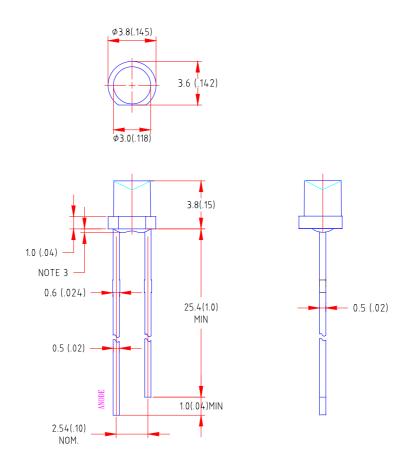


Features

- ♦ 3mm diameter Concave package
- ♦ Wide viewing angle
- ♦ General purpose leads
- ♦ Reliable and rugged

Package Dimension:



Part NO.	Lens Color	Source Color
LL-304HT1E-001	Red Transparent	Red

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(.010)$ mm 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

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Absolute Maximum Ratings at Ta=25℃

Parameter	MAX.	Unit	
Power Dissipation	100	mW	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA	
Continuous Forward Current	50	mA	
Derating Linear From 50°C	0.4	mA/°C	
Reverse Voltage	5	V	
Operating Temperature Range	-40°C to +80°C		
Storage Temperature Range	-40°C to +80°C		
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds		

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv		0.8		mcd	$I_{\rm F}$ =20mA (Note 1)
Viewing Angle	$2 heta_{_{1/2}}$		160		Deg	(Note 2)
Peak Emission Wavelength	λр		700		nm	I_F =20mA
Dominant Wavelength	λd		630		nm	I_F =20mA (Note 3)
Spectral Line Half-Width	Δλ		91		nm	$I_{\rm F}$ =20mA
Forward Voltage	V_{F}		2. 35	2.80	V	$I_{\rm F}$ =20mA
Reverse Current	I_R			100	μA	$V_R = 5V$

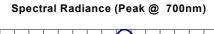
Note:

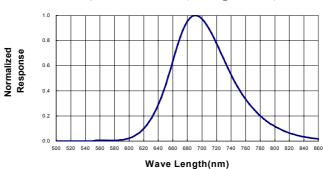
- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

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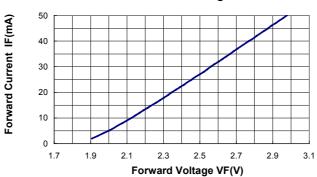


Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

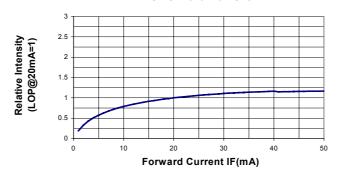




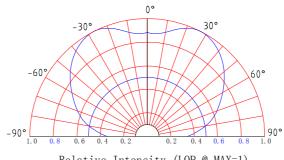
Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern



Relative Intensity (LOP @ MAX=1)