

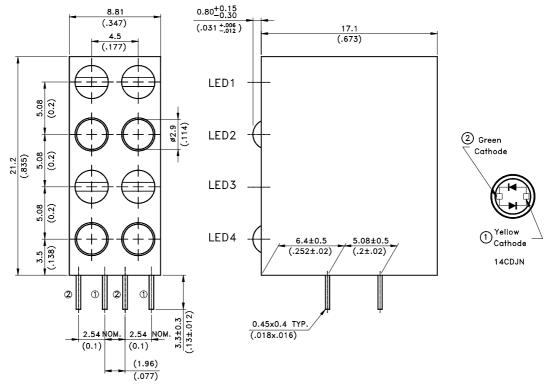
LITEON ELECTRONICS, INC.

Property of Lite-On Only

Features

- * Designed for ease in circuit board assembly.
- * Black case enhance contrast ratio.
- * Solid state light source.
- * Reliable and rugged.

Package Dimensions



Part No.	•	Source
LTL-	Lens	Color
14CDJN	White Diffused	Green/Yellow

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is \pm 0.25mm(.010") unless otherwise noted.
- 3. The holder color is black.
- 4. The holder raw material is nylon.
- 5. The LED1& LED3 are empty. The LED2& LED4 lamps are LTL-14CDJN.

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Absolute Maximum Ratings at Ta=25℃

Parameter	Green	Yellow	Unit		
Power Dissipation	100	60	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	80	mA		
Continuous Forward Current	30	20	mA		
Derating Linear From 50°C	0.4	0.25	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				

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Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	LTL- 42M2NMHLP	Min.	Тур.	Max.	Unit	Test Condition	
Luminous Intensity	Iv	Green	3.7	12.6		mcd	$I_F = 20 \text{mA}$	
		Yellow	2.5	8.7			Note 1,4	
Viewing Angle	2 0 1/2	Green		80		deg	Note 2 (Fig.6)	
		Yellow				ueg	11010 2 (11g.0)	
Peak Emission Wavelength	λp	Green		565		nm	Measurement	
		Yellow		585		nm	@Peak (Fig.1)	
Dominant Wavelength	λd	Green		569		****	Note 3	
		Yellow		588		nm		
Spectral Line Half-Width	Δλ	Green		30		*****		
		Yellow		35		nm		
Forward Voltage	VF	Green		2.1	2.6	V	$I_F = 20 \text{mA}$	
		Yellow		2.1	2.6	V		
Reverse Current	IR	Green			400	A	$V_R = 5V$, Note 5	
		Yellow			100	μ A		
Capacitance	С	Green		35		-F	$V_F = 0$, $f = 1MHz$	
		Yellow		15		рF		

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, λ d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. Iv needs $\pm 15\%$ additionary for guaranteed limits.
- 5. Reverse current is controlled by dice source.

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Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

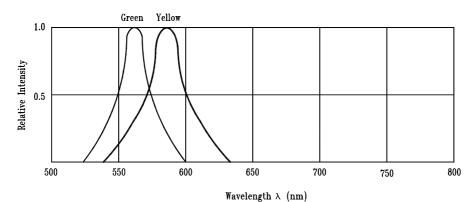


Fig.1 Relative Intensity vs. Wavelength

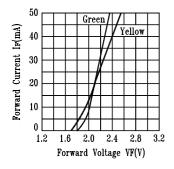


Fig.2 Forward Current vs. Forward Voltage

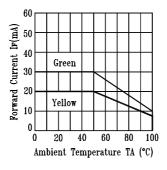


Fig.3 Forward Current Derating Curve

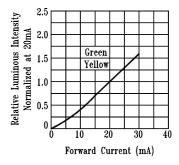


Fig.4 Relative Luminous Intensity vs. Forward Current

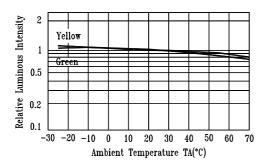


Fig.5 Luminous Intensity vs. Ambient Temperature

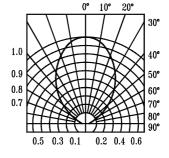


Fig.6 Spatial Distribution

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