



Spec No.: DS20-2001-291Effective Date: 05/08/2001

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

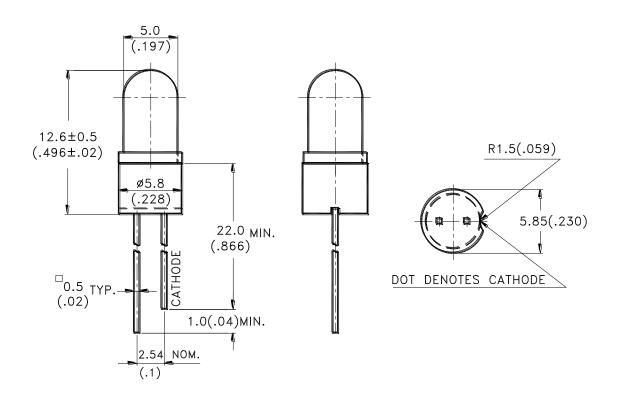


Property of Lite-On Only

Features

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

Package Dimensions



Lamp Part No.	Lens	Source Color
LTL-307G	Green Diffused	Green

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25 mm(.010") unless otherwise noted.
- 3. The spacer color is black.

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Property of Lite-On Only

Absolute Maximum Ratings at Ta=25 $^{\circ}$ C

Parameter	Maximum Rating	Unit			
Power Dissipation	100	mW			
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	mA			
Continuous Forward Current	30	mA			
Derating Linear From 50°C	0.4	mA/°C			
Reverse Voltage	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				

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Property of Lite-On Only

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	5.6	19		mcd	I _F = 10mA Note 1,4
Viewing Angle	2 \theta 1/2		50		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp		565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd		569		nm	Note 3
Spectral Line Half-Width	Δλ		30		nm	
Forward Voltage	VF		2.1	2.6	V	$I_F = 20 mA$
Reverse Current	I_R			100	μ A	$V_R = 5V$
Capacitance	С		35		рF	$V_F = 0$, $f = 1MHz$

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

- 2. $\theta_{1/2}$ 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.

Property of Lite-On Only

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

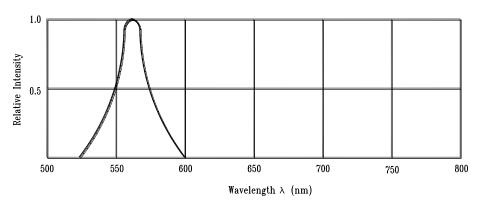


Fig.1 Relative Intensity vs. Wavelength

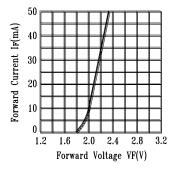


Fig.2 Forward Current vs. Forward Voltage

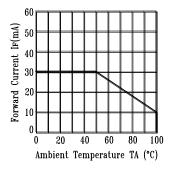


Fig.3 Forward Current Derating Curve

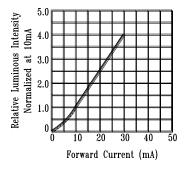


Fig.4 Relative Luminous Intensity vs. Forward Current

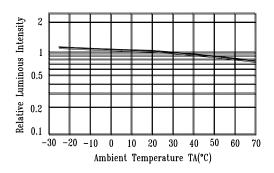


Fig.5 Luminous Intensity vs. Ambient Temperature

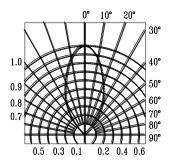


Fig.6 Spatial Distribution

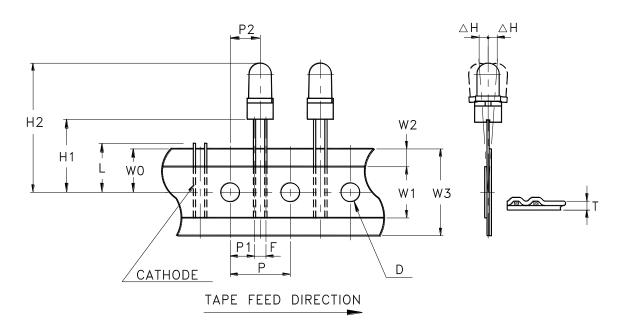
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Property of Lite-On Only

Features

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

Package Dimensions



		Specification				
Item	Symbol	Minimum		Maximum		
		mm	inch	mm	inch	
Tape Feed Hole Diameter	D	3.8	0.149	4.2	0.165	
Component Lead Pitch	F	2.3	0.091	3.0	0.118	
Front to Rear Deflection	∆H			2.0	0.078	
Feed Hole to Bottom of Component	H1	17.5	0.689	18.5	0.728	
Feed Hole to Overall Component Height	H2	29.6 1.165		31.6	1.244	
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	4.4	0.173	5.8	0.228	
Center of Component Location	P2	5.05	0.198	7.65	0.301	
Total Taped Thickness	Т			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	

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