



Spec No.: DS20-2000-294 Effective Date: 07/25/2000

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

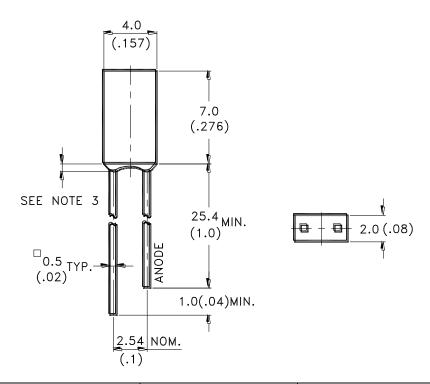
LITEON ELECTRONICS, INC.

Property of Lite-On Only

Features

- * Low power consumption.
- * Most suitable for use like level indicator.
- * Excellent uniformity of light emittance.
- * Long life solid state reliability.
- * I.C. compatible.

Package Dimensions



Part No.	Lens	Source Color		
LTL-403CJ	White Diffused	AlGaAs Red		

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25 mm(.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.

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Absolute Maximum Ratings at TA=25℃

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	200	mA
Continuous Forward Current	40	mA
Derating Linear From 50°C	0.5	mA/°C
Reverse Voltage	4	
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	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	12.6	40		mcd	I _F = 20mA Note 1,4
Viewing Angle	2 θ _{1/2}		104		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λР		660		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ d		638		nm	Note 3
Spectral Line Half-Width	Δλ		20		nm	
Forward Voltage	V_{F}		1.8	2.4	V	$I_F = 20 \text{mA}$
Reverse Current	I_R			100	μ A	$V_R = 4V$
Capacitance	С		30		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 $\pm 15\%$.

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Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

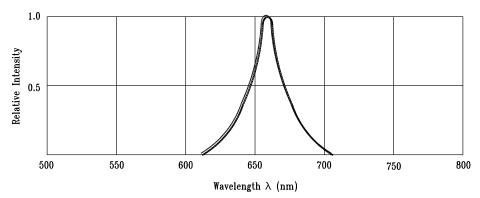
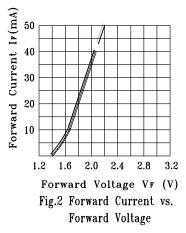
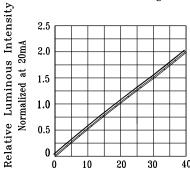
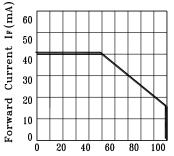


Fig.1 Relative Intensity vs. Wavelength





Forward Current (mA)
Fig.4 Relative Luminous Intensity
vs. Forward Current



Ambient Temperature TA(°C) Fig.3 Forward Current Derating Curve

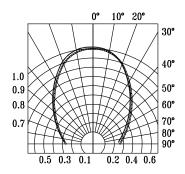


Fig.5 Spatial Distribution

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