

2x3mm QUAD-LEVEL LED INDICATOR

Part Number: L-914CK/4GDT

Green

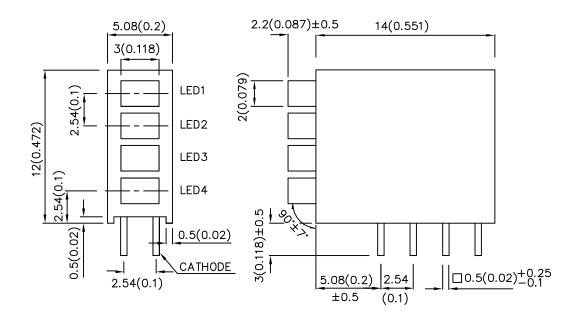
Features

- Quad-level design, save board space.
- Different color combination available .
- Black case enhances contrast.
- Housing UL rating:94V-0.
- Housing material: type 66 nylon.
- RoHS compliant.

Description

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

SPEC NO: DSAE7347 **REV NO: V.10B DATE: MAR/06/2013 APPROVED: WYNEC CHECKED: Allen Liu** DRAWN: Q.M.Chen





PAGE: 1 OF 5

ERP: 1102002264

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 10mA		Viewing Angle [1]
			Min.	Тур.	201/2
L-914CK/4GDT	Green (GaP)	Green Diffused	3	6	100°

Notes:

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 2. Luminous intensity/ luminous Flux: +/-15%.
- 3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	565		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2.2	2.5	V	IF=20mA
lr	Reverse Current	Green		10	uA	VR = 5V

Notes:

- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

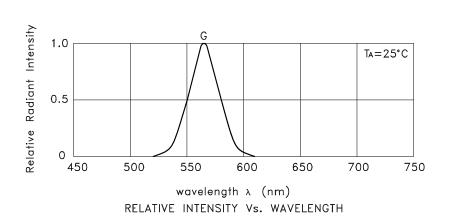
Parameter	Green	Units		
Power dissipation	62.5	mW		
DC Forward Current	25	mA		
Peak Forward Current [1]	140	mA		
Reverse Voltage	5	V		
Operating/Storage Temperature	-40°C To +85°C	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

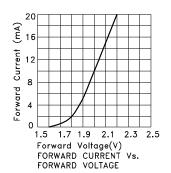
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

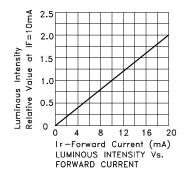
SPEC NO: DSAE7347 REV NO: V.10B DATE: MAR/06/2013 PAGE: 2 OF 5

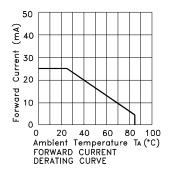
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Q.M.Chen ERP: 1102002264

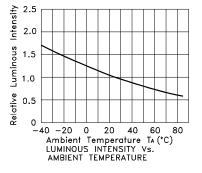


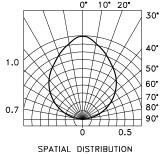
Green L-914CK/4GDT





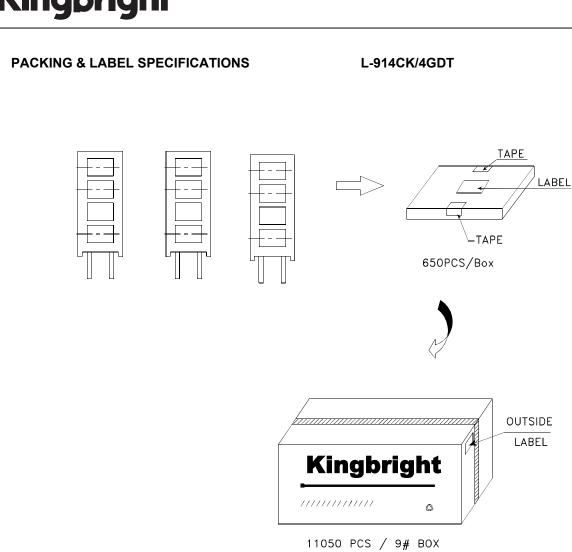


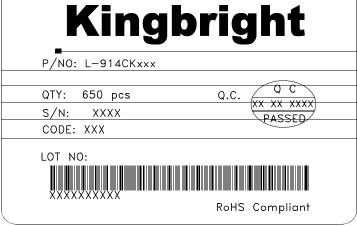




SPEC NO: DSAE7347 REV NO: V.10B DATE: MAR/06/2013 PAGE: 3 OF 5

APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Q.M.Chen ERP: 1102002264





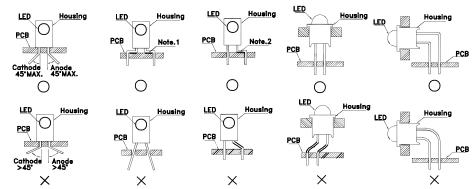
SPEC NO: DSAE7347 APPROVED: WYNEC

REV NO: V.10B CHECKED: Allen Liu DATE: MAR/06/2013 DRAWN: Q.M.Chen

PAGE: 4 OF 5 ERP: 1102002264

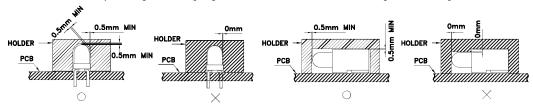
PRECAUTIONS

 The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead—forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.

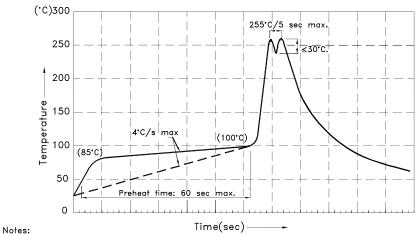


" \bigcirc " Correct mounting method "imes" Incorrect mounting method

2. During soldering, component covers and holders should leave clearance to avoid placing damaging stress on the LED during soldering.



- 3. The tip of the soldering iron should never touch the lens epoxy.
- 4. Through—hole LEDs are incompatible with reflow soldering.
- 5. If the LED will undergo multiple soldering passes or face other processes where the part may be subjected to intense heat, please check with Kingbright for compatibility.
- 6. Recommended Wave Soldering Profiles:



1.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C

2.Peak wave soldering temperature between 245°C \sim 255°C for 3 sec (5 sec max).

 $3.\mbox{Do}$ not apply stress to the epoxy resin while the temperature is above $85\mbox{^{\circ}C.}$

4.Fixtures should not incur stress on the component when mounting and during soldering process.

5.SAC 305 solder alloy is recommended.

6.No more than one wave soldering pass.

Detailed application notes are listed on our website.

http://www.kingbright.com/application notes

 SPEC NO: DSAE7347
 REV NO: V.10B
 DATE: MAR/06/2013
 PAGE: 5 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: Q.M.Chen
 ERP: 1102002264