



LED Display

Product Data Sheet

LTC-3620KG

Spec No.: DS30-2011-0034

Effective Date: 06/20/2012

Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITE-ON Technology Corp. / Optoelectronics

No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.

Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660

<http://www.liteon.com/opto>

LED DISPLAY**LTC-3620KG**
DATA SHEET

ITEM	DESCRIPTION	ISSUER	DATE
1	New Spec.	Reo Lin	03/03/2011
2	Revised Drawing (See Page3) Revised Drawing to fit actual part: Spacer and reflector Gap	Reo Lin	8/18/2011
3	Add Spec. in Page 3	Reo Lin	6/14/2012

FEATURES

- * 0.39 inch (10 mm) DIGIT HEIGHT
- * CONTINUOUS UNIFORM SEGMENTS
- * LOW POWER REQUIREMENT
- * EXCELLENT CHARACTERS APPEARANCE
- * HIGH BRIGHTNESS & HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * CATEGORIZED FOR LUMINOUS INTENSITY
- * **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

DESCRIPTION

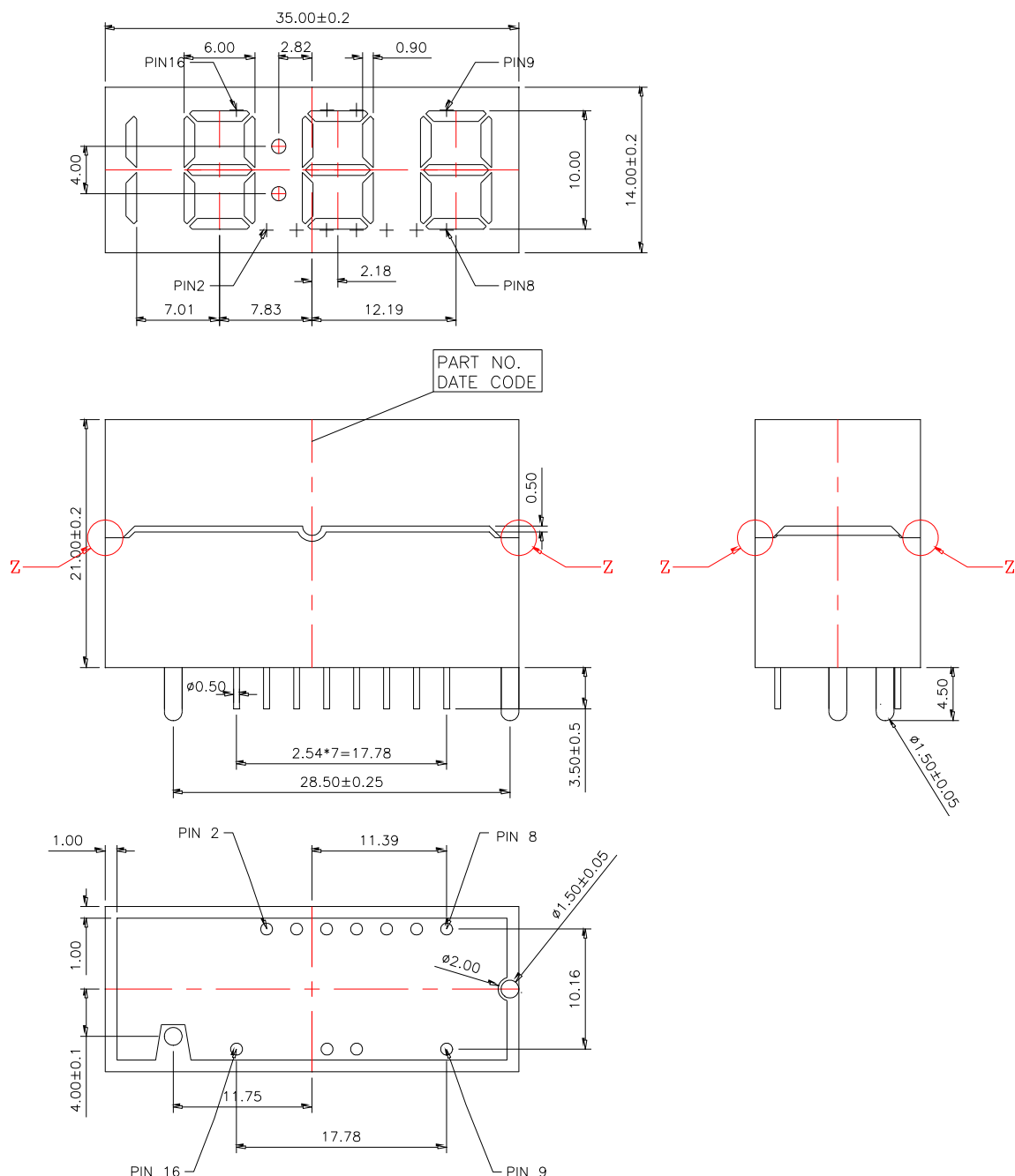
The LTC-3620KG is a 0.39inch (10 mm) height digit display. The devices utilize AlInGaP Green LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP green	COMMON ANODE
LTC-3620KG	

Property of Lite-On Only

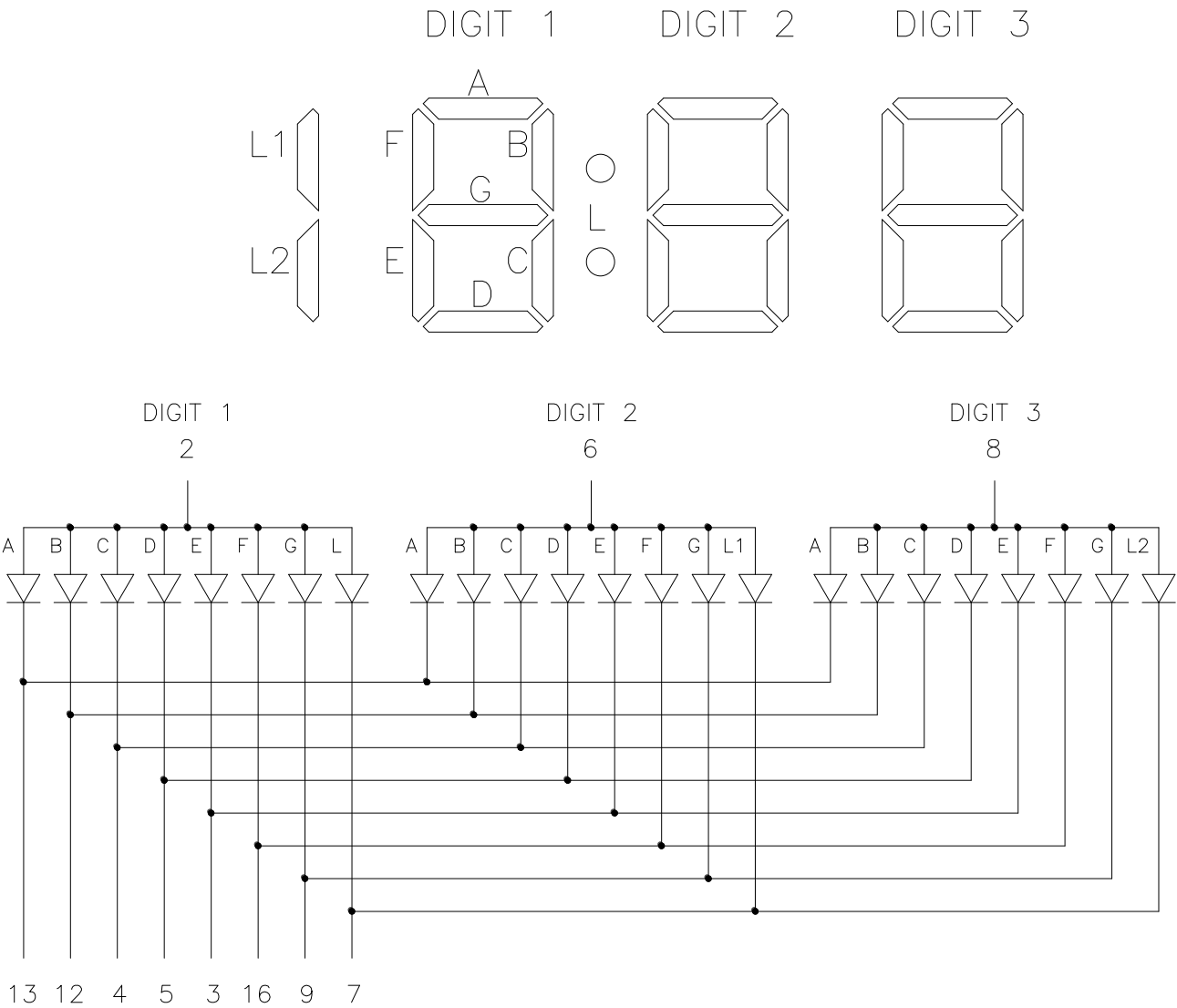
PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
2. Pin tip's shift tolerance is $\pm 0.4\text{mm}$.
3. Foreign material on segment $\leq 10\text{mils}$
4. Ink contamination (surface) $\leq 20\text{mils}$
5. Bending $\leq 1\%$ of reflector length
6. Bubble in segment $\leq 10\text{mils}$
7. Recommend the best pcb hole : diameter 1.0mm
8. Details Z: The spacer allow to slip out $\pm 0.5\text{ mm}$

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	NO PIN
2	COMMON ANODE (DIGIT 1)
3	CATHODE E
4	CATHODE C
5	CATHODE D
6	COMMON ANODE (DIGIT 2)
7	CATHODE L / L1 / L2
8	COMMON ANODE (DIGIT 3)
9	CATHODE G
10	NO PIN
11	NO PIN
12	CATHODE B
13	CATHODE A
14	NO PIN
15	NO PIN
16	CATHODE F

ABSOLUTE MAXIMUM RATING AT T_A=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Chip	70	mW
Peak Forward Current Per Chip (1/10 Duty Cycle, 0.1ms Pulse Width)	60	mA
Continuous Forward Current Per Chip	25	mA
Derating Linear From 25 °C Per Chip	0.28	mA/°C
Operating Temperature Range	-35 °C to +105 °C	
Storage Temperature Range	-35 °C to +105 °C	
Solder Temperature: max 260°C for max 3sec at 1.6mm below seating plane		

TRICAL / OPTICAL CHARACTERISTICS AT T_A=25°C

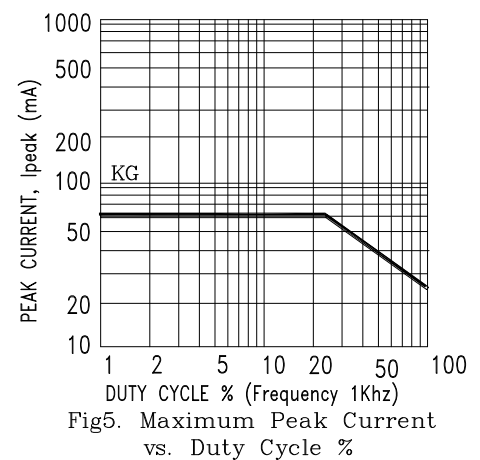
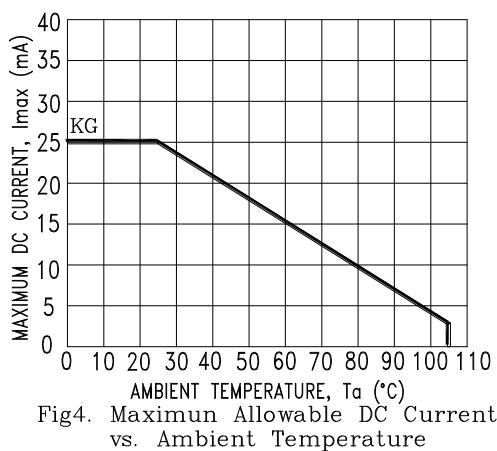
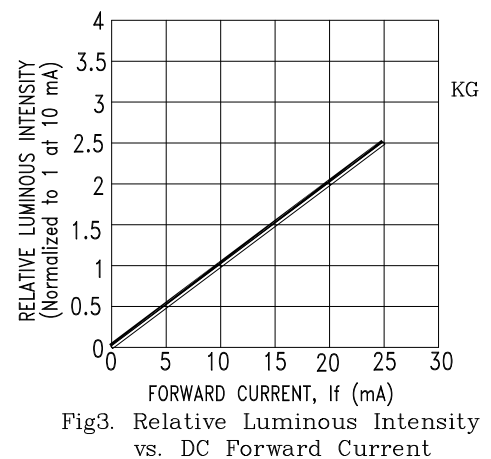
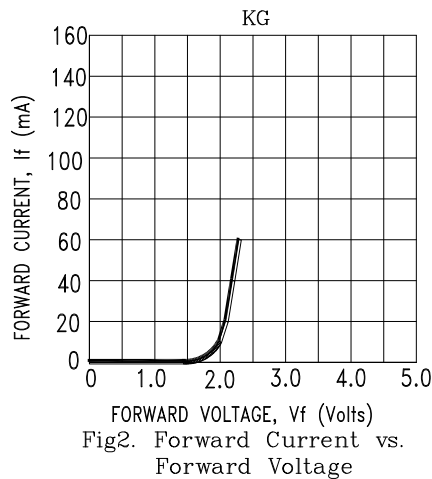
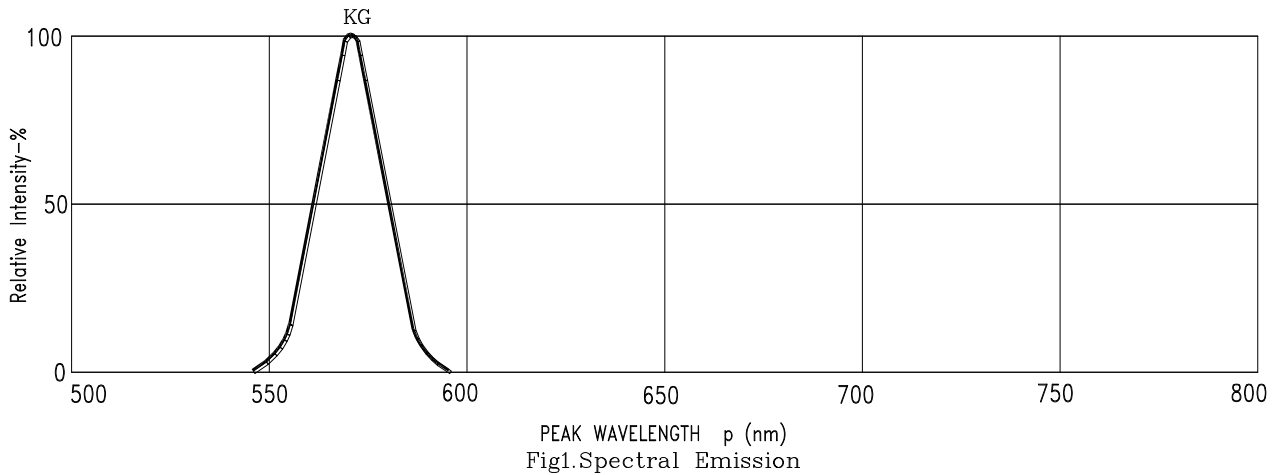
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _V	200	585		μcd	I _F =1mA
			6435		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		571		nm	I _F =20mA
Spectral Line Half-Width	Δλ		15		nm	I _F =20mA
Dominant Wavelength	λ _d		572		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.0	2.6	V	I _F =20mA
Reverse Current Per Segment ⁽²⁾	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _V -m			2:1		I _F =1mA

Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.
2. Reverse voltage is only for IR test. It can not continue to operate at this situation.
3. Cross talk specification ≤ 2.5%

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : KG=AlInGaP Green