

LED DISPLAY**LTC-4627B**
DATASHEET

<u>Rev</u>	<u>Description</u>	<u>By</u>
01	ORIGINAL (Refer to contour drawing Revision (-))	<u>Vanessa Lee</u> <u>8/11/2000</u>
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	<u>Vanessa Lee</u> <u>8/11/2000</u>
A	Revise temperature Range from 85°C to 105°C	<u>KITTISAK</u> <u>2/25/2008</u>

SPEC. NO.: DS30-2000-180DATE : Feb 25/2008REV. NO. : APAGE NO. : 0 OF 5

FEATURES

- * 0.4inch (10.0mm) 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.

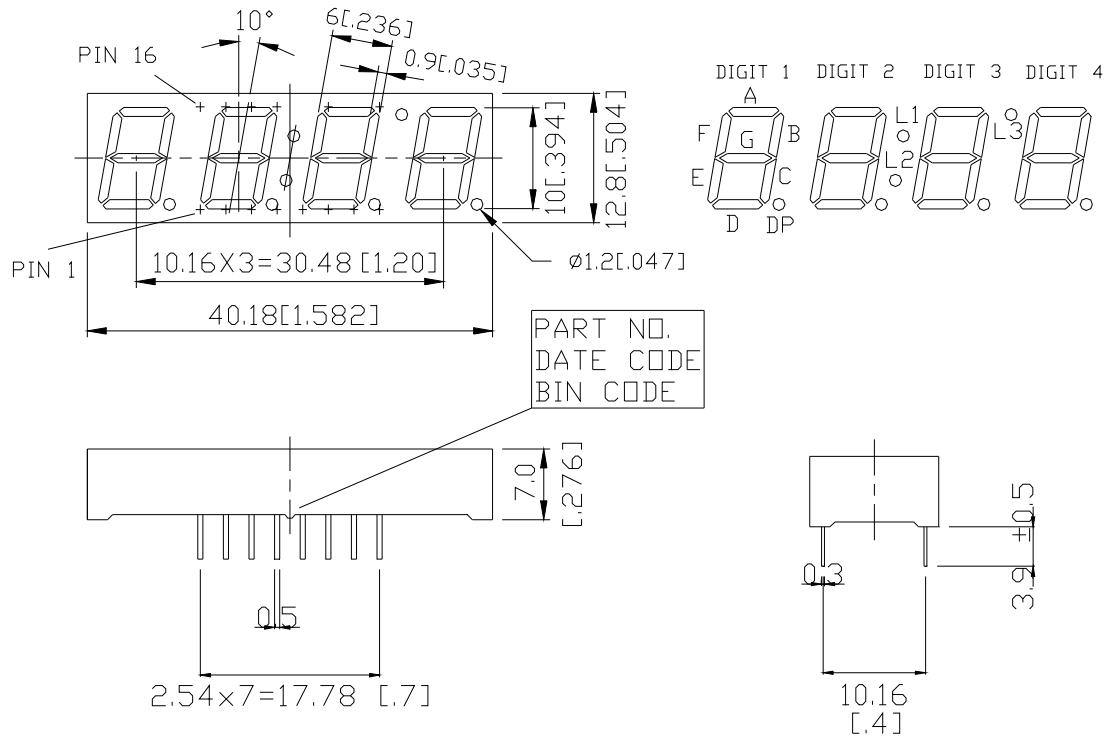
DESCRIPTION

The LTC-4627B is a 0.4 inch (10.0 mm) digit height quadruple digit seven-segment display. This device uses InGaN BLUE LED chips (InGaN epi on SiC substrate), and has a gray face and white segments.

DEVICE

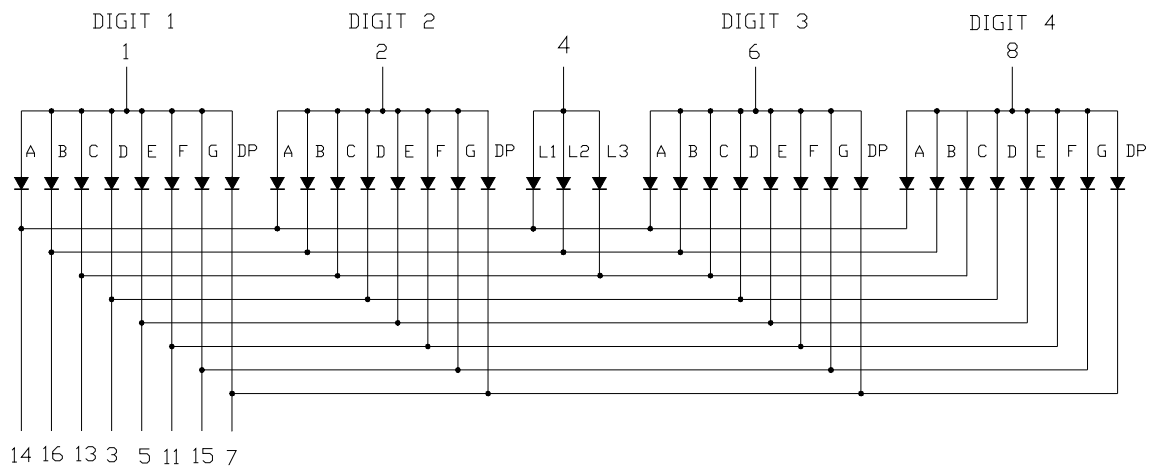
PART NO.	DESCRIPTION
InGaN BLUE	Multiplex Common Anode
LTC-4627B	Rt. Hand Decimal

PACKAGE DIMENSIONS



- NOTES: 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted.
 2. Pin tip's shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

NO	CONNECTION
1	COMMON ANODE DIGIT 1
2	COMMON ANODE DIGIT 2
3	CATHODE D
4	COMMON ANODE L1,L2,L3
5	CATHODE E
6	COMMON ANODE DIGIT 3
7	CATHODE DP
8	COMMON ANODE DIGIT 4
9	NO CONNECTION
10	NO PIN
11	CATHODE F
12	NO PIN
13	CATHODE C,L3
14	CATHODE A,L1
15	CATHODE G
16	CATHODE B,L2

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	115	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	60	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	30 0.16	mA mA/°C
Reverse Voltage Per Segment	5	V
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. or temperature of unit (during assembly) not over max. temperature rating above		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	5000	13000		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		468		nm	I _F =5mA
Spectral Line Half-Width	Δλ		25		nm	I _F =5mA
Dominant Wavelength	λ _d		470		nm	I _F =5mA
Forward Voltage Per Segment	V _F	2.5		3.5	V	I _F =5mA
Reverse Current Per Segment	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =10mA

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

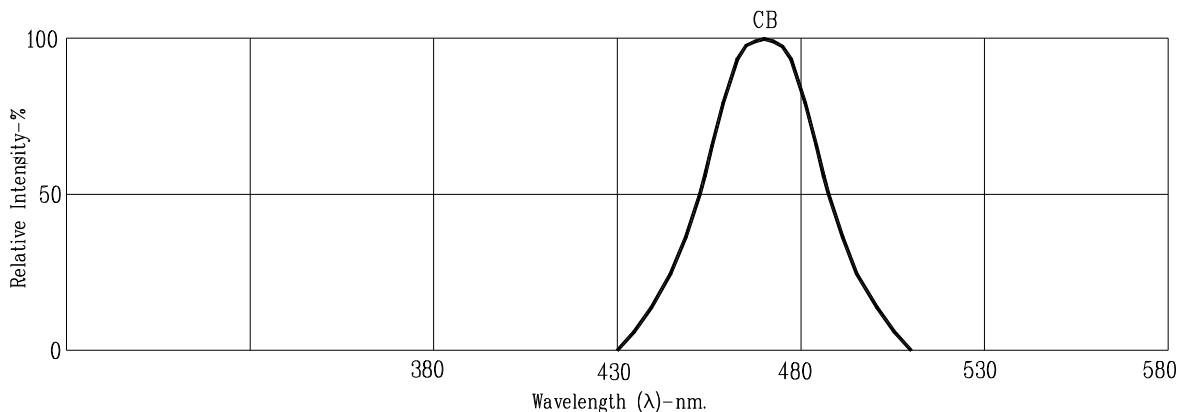


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

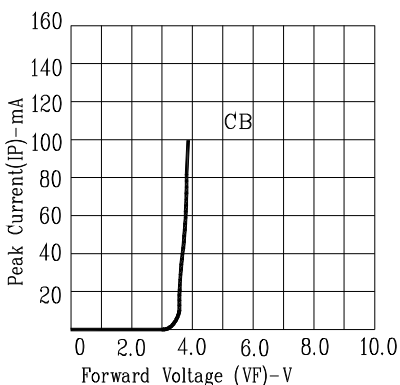


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

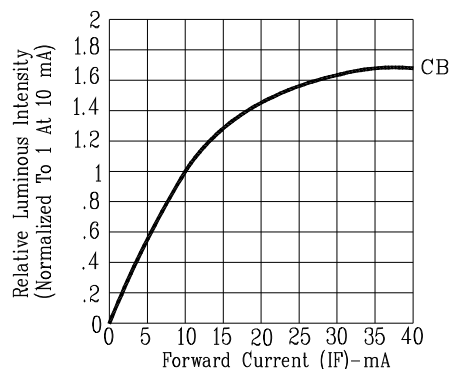


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

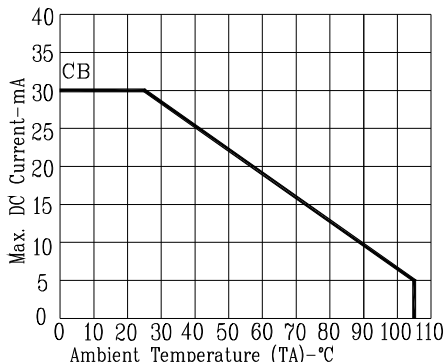


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

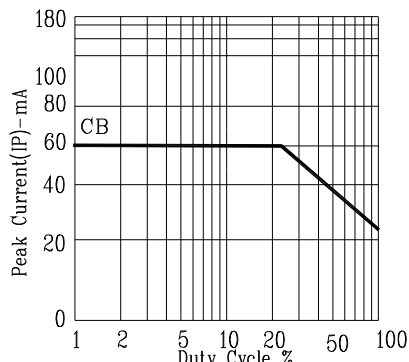


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: CB=InGaN Blue