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SPECIFICATION

PART NO. : LA(C)51B1-A1-URE6 BWEW
5.0"(127.0mm) SINGLE DIGIT DISPLAY

Approved by

Checked by

Prepared by

San

Dodo

Xiang



5.0"(127.0mm) SINGLE DIGIT DISPLAY

PART NO. : LA(C)51B1-A1-URE6 BWEW

Page : 1/5

Features

- * 5.0-INCH(127.0-mm) DIGIT HEIGHT.**
- * LOW CURRENT REQUIREMENTS.**
- * WIDE VIEWING ANGLE.**
- * SOLIDE STATE RELIABILITY**
- * I.C. COMMPATIBLE.**
- * CATEGORIZED FOR LUMINOUS INTENSITY.**

Description

The LA(C)51BB1-A1-URE6 is a 5.0-inch (127.0-mm) digit height single digit seven-segment display.

The blue LED chips , which are made from InGaN on a transparent Sapphire substrate.
The device has a black face and white segments.

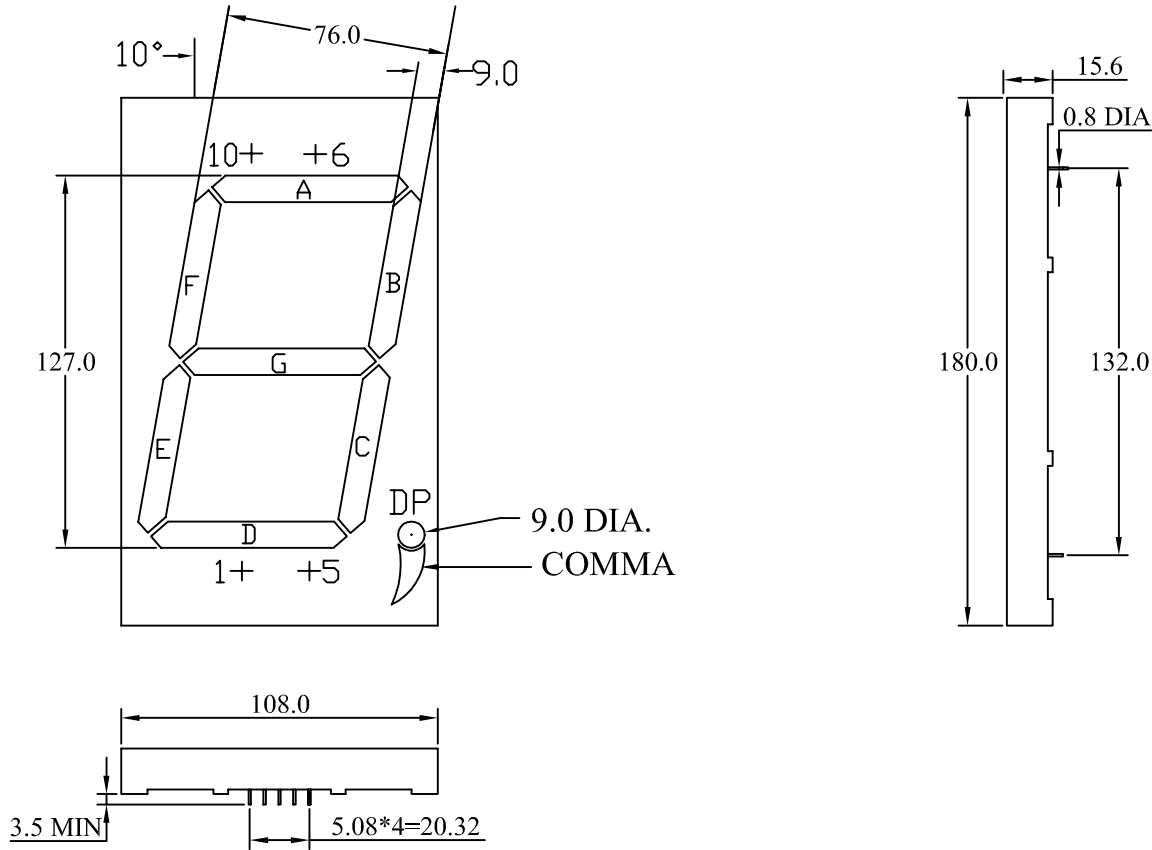
Part No.	Led Chip		Description
	Material	Emitting Color	
LA51B1-A1-URE6 BWEW	InGaN/Sapphire	BLUE	Common Anode
LC51B1-A1-URE6 BWEW			Common Cathode



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PART NO. : LA(C)51B1-A1-URE6 BWEW

Page : 2/5

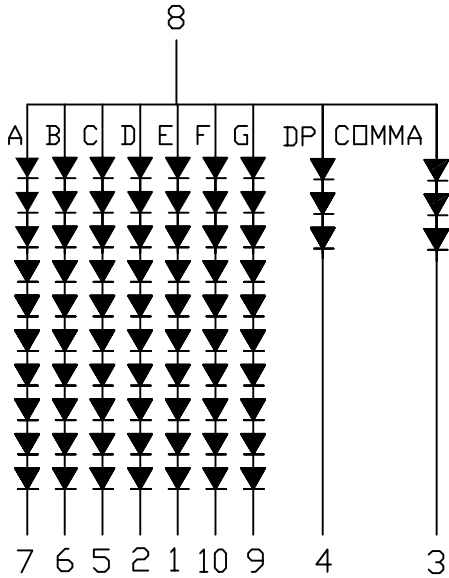
Package Dimensions



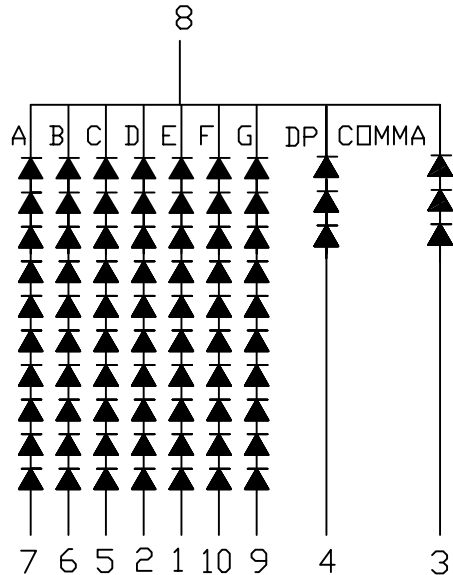
1. ALL DIMENSIONS ARE IN mm , TOLERANCE IS $\pm 0.25\text{mm}$ UNLESS OTHERWISE NOTED.
2. THE SLOPE ANGLE OF ANY PIN MAY BE $\pm 5.0^\circ$ MAX.

Internal Circuit Diagram

LA51B1-A1-URE6



LC51B1-A1-URE6





5.0"(127.0mm) SINGLE DIGIT DISPLAY

PART NO. : LA(C)51B1-A1-URE6 BWEW

Page : 3/5

Pin Function

LA51B1-A1-URE6		LC51B1-A1-URE6	
Pin No.	Function	Pin No.	Function
1	CATHODE E	1	ANODE E
2	CATHODE D	2	ANODE D
3	CATHODE COMMA	3	ANODE COMMA
4	CATHODE DP	4	ANODE DP
5	CATHODE C	5	ANODE C
6	CATHODE B	6	ANODE B
7	CATHODE A	7	ANODE A
8	COMMON ANODE	8	COMMON CATHODE
9	CATHODE G	9	ANODE G
10	CATHODE F	10	ANODE F



5.0"(127.0mm) SINGLE DIGIT DISPLAY
PART NO. : LA(C)51B1-A1-URE6 BWEW

Page : 4/5

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage Per Led Chip	Vr	5	V
D.C. Forward Current Per Led Chip	If	30	mA
Pulse Current Per Led Chip (1/10 Duty Cycle , 0.1 ms Pulse Width)	If(Peak)	100	mA
Operating Temperature Range	Topr	-25 to +85	°C
Storage Temperature Range	Tstg	-40 to +100	°C
Lead Soldering Temp.(1.6mm from seating plane) for 3 seconds		260	°C
ESD		300	V

Electrical and Optical Characteristics :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=10mA	34.8	45.0		mcd
Forward Voltage Per Segment	Vf	If=20mA		35.0	45.0	V
				10.5	13.5	
Wavelength	λ P	If=20mA		468		nm
	λ D			470		
Reverse Current Per Segment	Ir	Vr=5V			100	μ A
Spectrum Line Halfwidth	△λ	If=20mA		20		nm

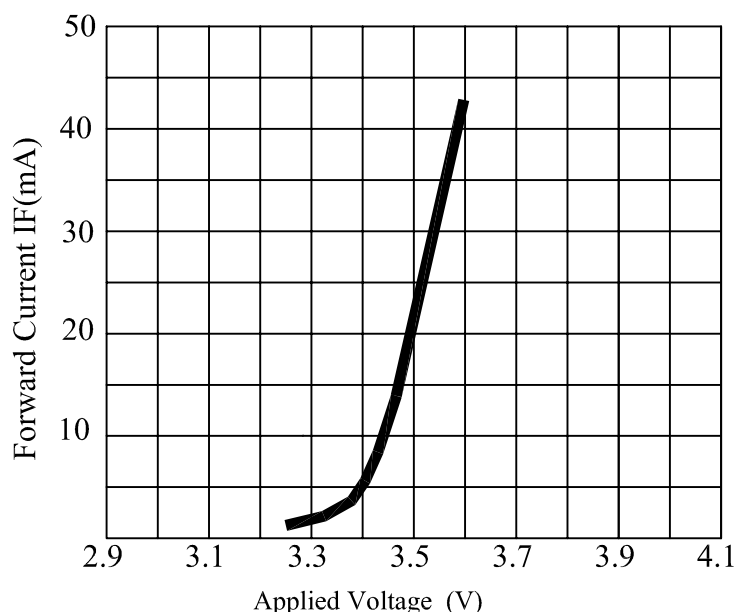


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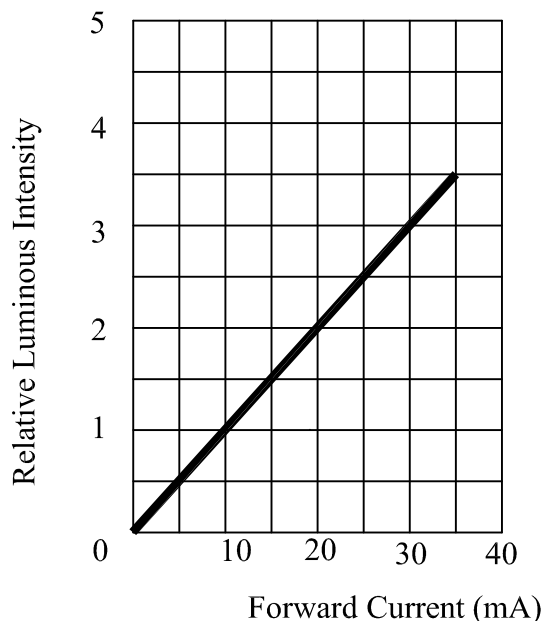
PART NO. : LA(C)51B1-A1-URE6 BWEW

Page : 5/5

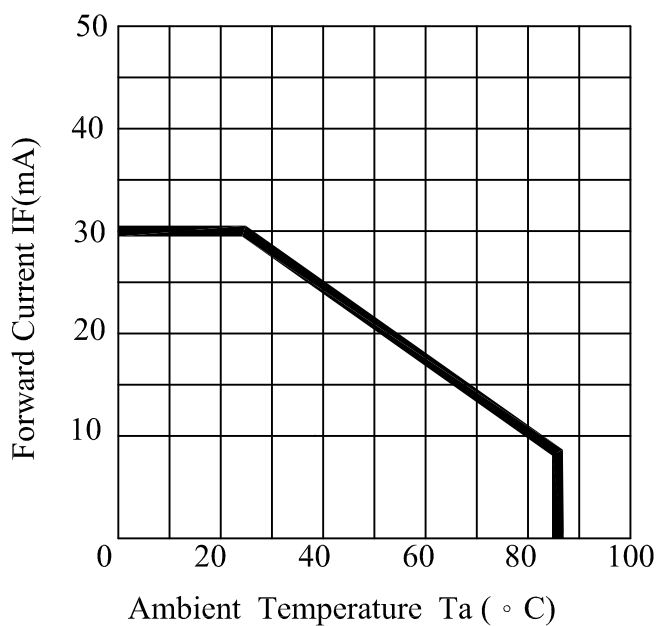
Typical Electrical/Optical Characteristic Curves
(25°C Ambient Temperature Unless Otherwise Noted)



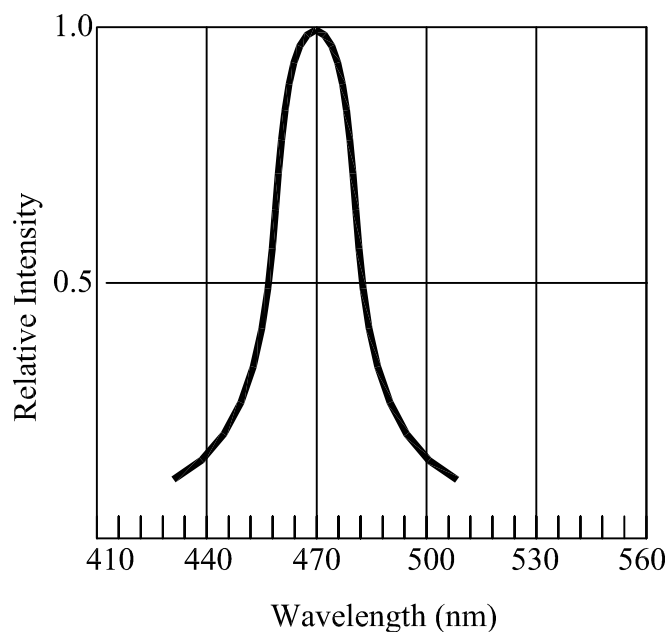
FORWARD CURRENT VS. APPLIED VOLTAGE
(PER CHIP)



LUMINOUS INTENSITY VS. FORWARD CURRENT



FORWARD CURRENT VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. WAVELENGTH