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SPECIFICATION

PART NO. : LI5622-11 EWRS

0.56"(14.22mm) DUAL DIGIT
INTELLIGENT DISPLAY

Approved by	Checked by	Prepared by
Jack	*Dodo*	*Hong*

0.56"(14.22mm) DUAL DIGIT INTELLIGENT DISPLAY
PART NO. : LI5622-11 EWRS

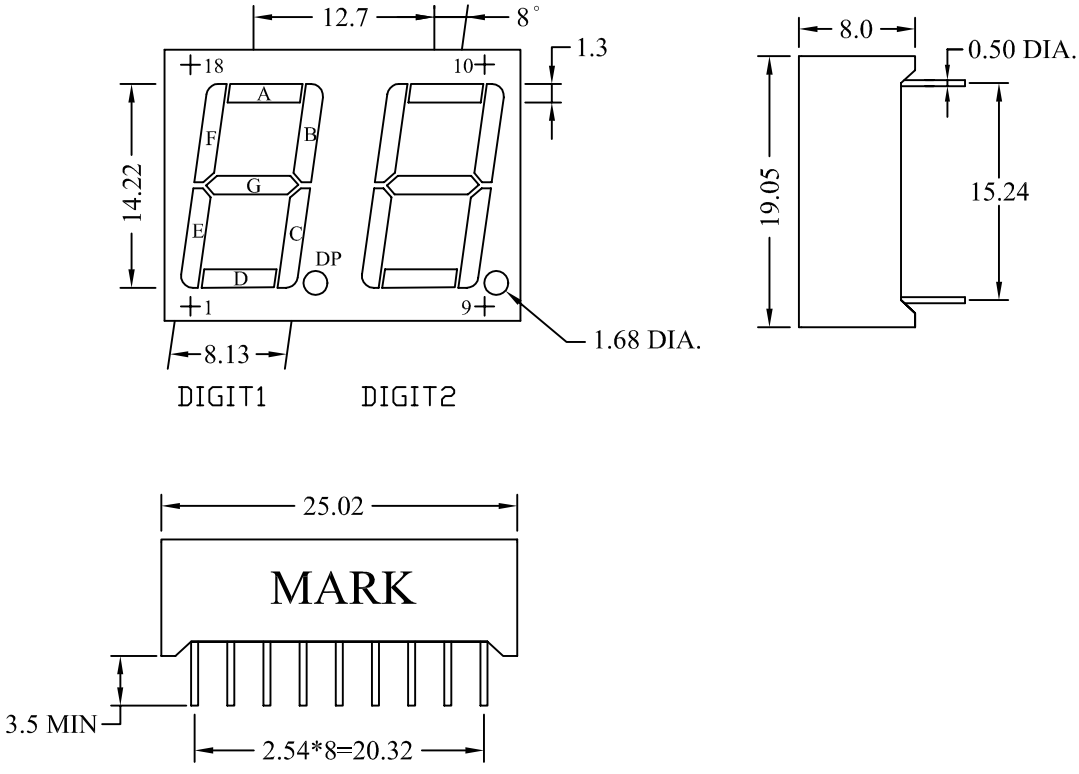
Features

* 0.56-INCH(14.22-mm) DIGIT HEIGHT.
* BUILT IN 5450 IC CHIP.
* EXCELLENT CHARACTER APPERANCE.
* HIGH LIGHT OUTPUT.

Casual Description

The LI5622-11 is a 0.56-inch (14.22-mm) digit height dual digit seven-segment intelligent display.
The Green LED chips are made from GaP on a transparent GaP substrate.
The device has a grey face and white segments.

Package Dimensions



1.ALL DIMENSIONS ARE IN mm , TOLERANCE IS ± 0.25mm UNLESS OTHERWISE NOTED.
2.THE SLOPE ANGLE OF ANY PIN MAY BE ± 5.0° MAX.

Funtional Description

The block diagram is shown in Figure1.The brightness of displays are determined by the output sink current.To prevent oscillations,a inf capacitor should be connected to the pin of brightness control.
The input data format is shown in Figure2.
The timing relationships between data,clock and data enable are shown in Figure3.

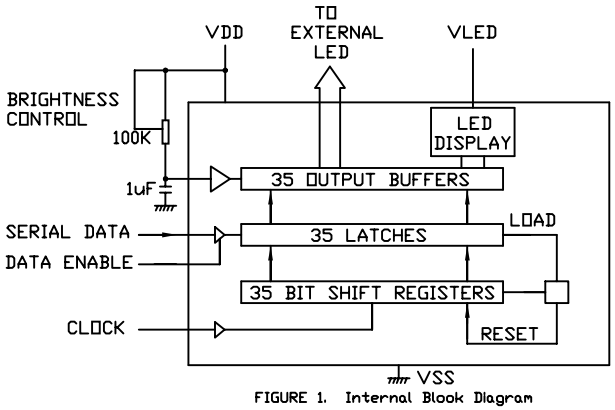


FIGURE 1. Internal Block Diagram

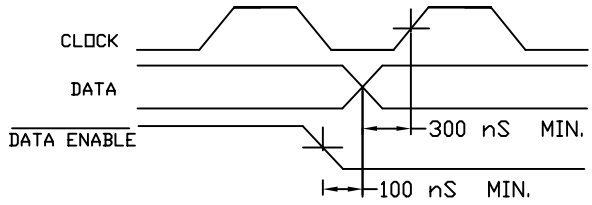


FIGURE 2. Input Data Format

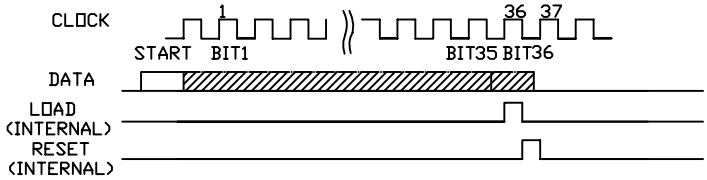


FIGURE 3. Timing Relationship

Serial Data Input Squence

BIT NO.	DIGIT/ SEGMENT	BIT NO.	DIGIT/ SEGMENT
1	1/A	18	PIN.7
2	1/B	19	PIN.8
3	1/C	20	PIN.9
4	1/D	21	PIN.10
5	1/E	22	PIN.11
6	1/F	23	PIN.12
7	1/G	24	PIN.13
8	1/DP	25	NC
9	2/A	26	NC
10	2/B	27	NC
11	2/C	28	NC
12	2/D	29	NC
13	2/E	30	NC
14	2/F	31	NC
15	2/G	32	NC
16	2/DP	33	NC
17	PIN.6	34	NC

Pin Function

LI5622-11			
Pin No.	Function	Pin No.	Function
1	VSS	10	BIT 21 OUTPUT
2	VLED	11	BIT 22 OUTPUT
3	NO PIN	12	BIT 23 OUTPUT
4	NO PIN	13	BIT 24 OUTPUT
5	NO PIN	14	DATA ENABLE
6	BIT 17 OUTPUT	15	DATA INPUT
7	BIT 18 OUTPUT	16	CLOCK INPUT
8	BIT 19 OUTPUT	17	VDD
9	BIT 20 OUTPUT	18	BRT. CONTROL

Absolute Maximum Ratings at Ta=25℃

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 +60	℃
Storage Temperature Range	Tstg	-25 to +60	℃
Lead Soldering Temp.(1.6mm from seating plane) for 3 seconds		260	℃

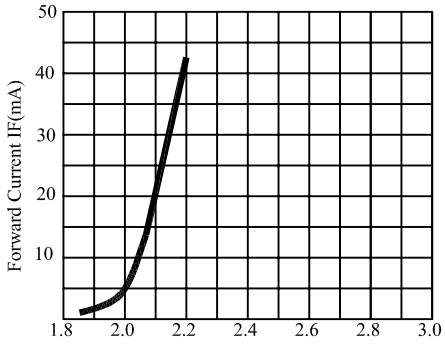
Electrical Characteristics For Operating At T_A=25° :

Parameter	Test Condition	Min.	Typ.	Max.	Unit
Supply Voltage(V_{DD})		4.75		5.25	V
Supply Current	Excluding Output Loads			7.0	mA
Input Clock Frequency				500	KHz
Input Voltage Logical "0" Level Logical "1" Level	± 10uA Input Bias 4.75 ≦ V_{DD} ≦ 5.25V V_{DD}>5.25V	-0.3 2.2 V_{DD}-2		0.8 V_{DD} V_{DD}	V
Output Sink Current Segment Off Segment On	Brightness Input(I_B)=0uA Brightness Input(I_B)=240uA	0	 10.0	10.0	uA mA
*LED Supply Voltage(V_{LED})		2.5		3.5	V

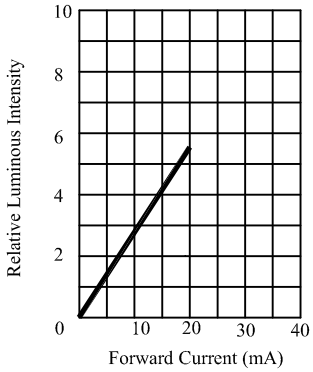
Electrical and Optical Characteristics For LED At T_A=25° :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	Is=0.4mA	1.7	2.9		mcd
Wavelength	λ P	I_B=0.4mA		567		nm
	λ D			572		
Reverse Current Per Segment	Ir	Vr=5V			100	μ A
Spectrum Line Halfwidth	△λ	I_B=0.4mA		30		nm

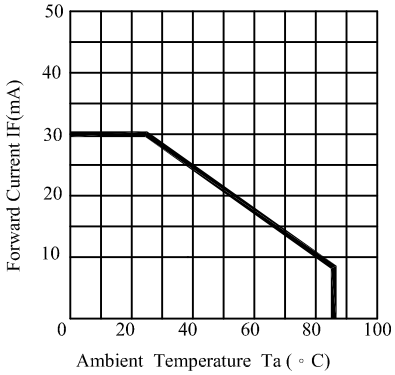
Typical Electrical/Optical Characteristic Curves
(25℃ Ambient Temperature Unless Otherwise Noted)



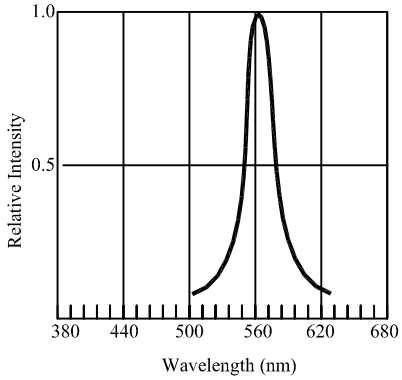
FORWARD CURRENT VS.APPLIED VOLTAGE



LUMINOUS INTENSITY VS. FORWARD CURRENT



FORWARD CURRENT VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. WAVELENGTH