WINSTAR Display

OLED SPECIFICATION

Model No:

WEH1602G#D00-FC

WINSTAR DISPLAY Co., Ltd.

SPECIFICATION Version: I

CUSTOMER :
MODULE NO. : WEH1602G#D00-FC

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
first FC components			
RELEASE DATE:			

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MODEL NO：

RECORDS OF REVISION			DOC. FIRST ISSUE
VERSION	DATE	REVISED PAGE NO.	SUMMARY
0	2010/04/20		First release
A	2010/10/26		Correct Shift left
B	2010/12/13		68 series only
C	2011/03/03		Remove IC information.
D	2011/11/07		Correct count drawing.
E	2014/01/20		Add information of Module Life Time
F	2014/02/11		Correct VIH / VIL.
G	2014/06/12		Add Low Temperature storage.
H	2015/01/15		Modify Block Diagram.
I	2016/03/23		Modify Static electricity test

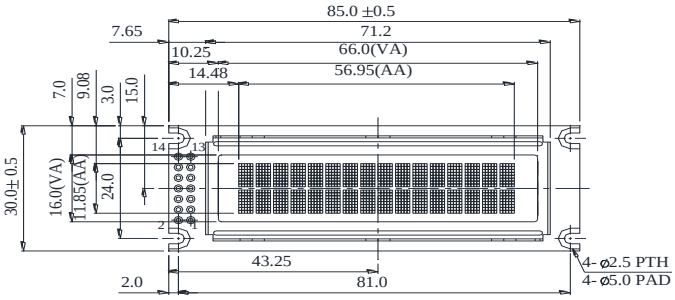
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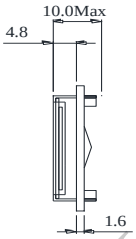
2.General Specification

Item	Dimension	Unit
Number of Characters	16 characters x 2 Lines	—
Module dimension	85.0 x 30.0 x 10.0(MAX)	mm
View area	66.0 x 16.0	mm
Active area	56.95 x 11.85	mm
Dot size	0.55 x 0.65	mm
Dot pitch	0.60x 0.70	mm
Character size	2.95 x 5.55	mm
Character pitch	3.6 x 6.3	mm
Panel type	OLED , Green	
Duty	1/16	

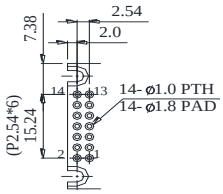
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3.Contour Drawing & Block Diagram

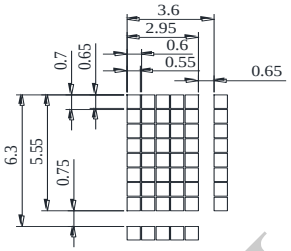




PIN NO.	SYMBOL
1	Vdd
2	Vss
3	NC
4	RS
5	R/$\overline{W}$
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7



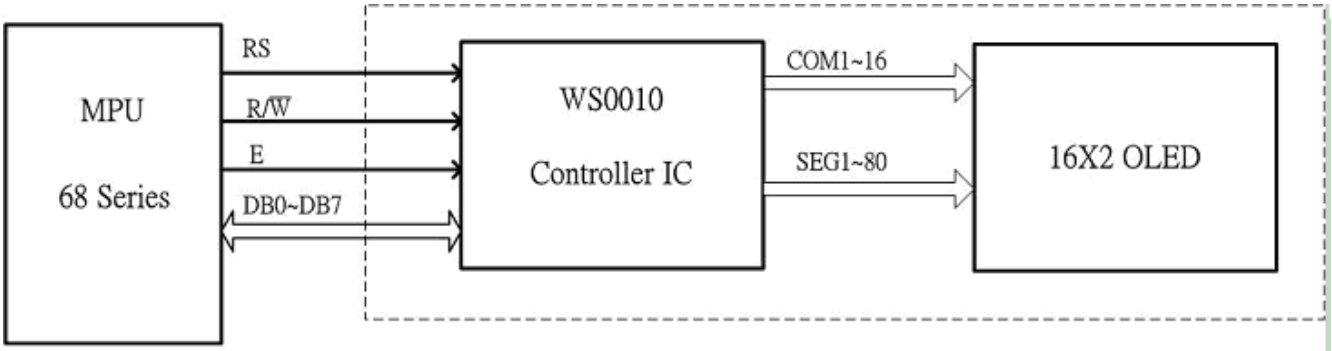
PIN DETAIL



DOT SIZES
SCALE 5/1

The non-specified tolerance of dimension is ±0.3 mm .

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Address Format	DB7	DB6	DB5	DB4	DB3	DB2	DB1	DB0
CA (Character Address)	1	ADD6	ADD5	ADD4	ADD3	ADD2	ADD1	ADD0

1	2	3	4	……	……	13	14	15	16
CA=10000000b	CA=10000001b	CA=10000010b	CA=10000011b	……	……	CA=10001100b	CA=10001101b	CA=10001110b	CA=10001111b
CA=11000000b	CA=11000001b	CA=11000010b	CA=11000011b	……	……	CA=11001100b	CA=11001101b	CA=11001110b	CA=11001111b

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4.Interface Pin Function

Pin No.	Symbol	Level	Description
1	VDD	5.0V	Supply Voltage for logic
2	VSS	0V	Ground
3	NC	—	
4	RS	H/L	H: DATA, L: Instruction code
5	R/W	H/L	H: Read(Module→MPU) L: Write(MPU→Module)
6	E	H,H→L	Chip enable signal
7	DB0	H/L	Data bit 0
8	DB1	H/L	Data bit 1
9	DB2	H/L	Data bit 2
10	DB3	H/L	Data bit 3
11	DB4	H/L	Data bit 4
12	DB5	H/L	Data bit 5
13	DB6	H/L	Data bit 6
14	DB7	H/L	Data bit 7

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5.Absolute Maximum Ratings

Item	Symbol	Min	Max	Unit	Notes
Operating Temperature	T_{OP}	-40	+80	℃	
Storage Temperature	T_{ST}	-40	+80	℃	
Supply Voltage For Logic	VDD-V_{SS}	-0.3	5.3	V	

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6.Electrical Characteristics

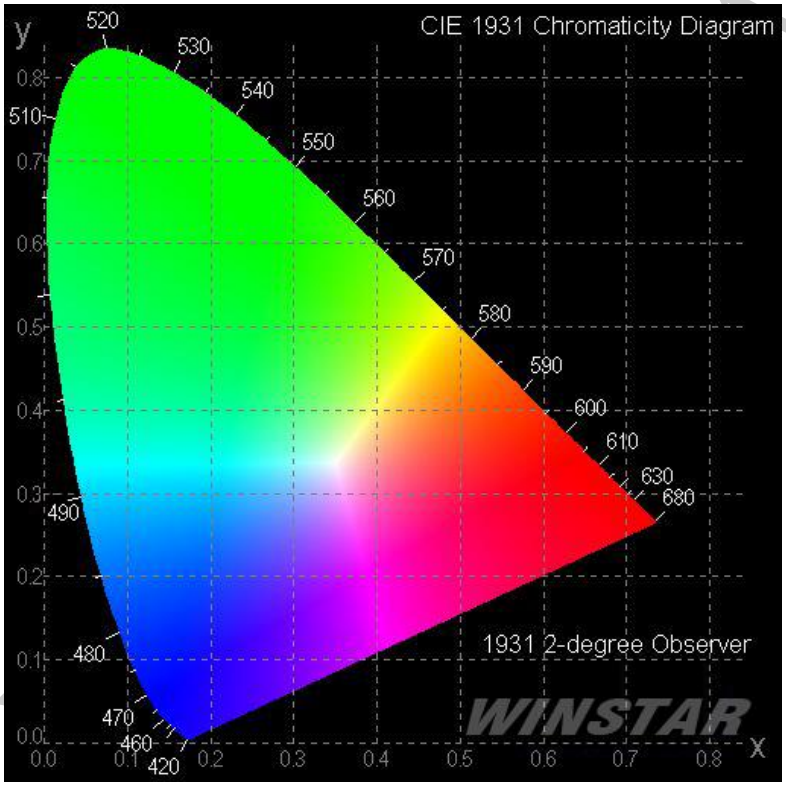
Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	VDD-VSS	—	4.8	5.0	5.3	V
Input High Volt.	VIH	—	0.8 VDD	—	VDD	V
Input Low Volt.	VIL	—	GND	—	0.2 VDD	V
Output High Volt.	VOH	IOH=-0.5mA	0.8 VDD	—	VDD	V
Output Low Volt.	VOL	IOL=0.5mA	GND	—	0.2 VDD	V
50% Check Board Operating Current	IDD	VDD=5V	30	35	42	mA

Note: When you use 5V for Vdd please don't use 3V or 3.3V for logic I/O this will cause module does not work.

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7.Optical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
View Angle	(V)θ		160			deg
	(H)φ		160			deg
Contrast Ratio	CR	Dark	2000:1		—	—
Response Time	T rise	—		10		μs
	T fall	—		10		μs
Display with 50% check Board Brightness			100	120		cd/m2
CIEx(Green)		(CIE1931)	0.24	0.28	0.32	
CIEy(Green)		(CIE1931)	0.59	0.63	0.67	



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