Winstar Display Co., LTD
華凌光電股份有限公司
WEB: https://www.winstar.com.tw E-mail: sales@winstar.com.tw

SPECIFICATION

CUSTOMER : _____

MODULE NO.: WG14432D-TMI-V#T

APPROVED BY: (FOR CUSTOMER USE ONLY)	**PCB VERSION:**	**DATA:**

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY

VERSION	DATE	REVISED PAGE NO.	SUMMARY
H	2019/12/17		Modify Precautions in use of LCD Modules

Represented by:
FIRST Components s.r.l.
www.first-components.com
technical@first-components.com
+39 0332 1888005

3.General Specification

Item	Dimension	Unit
Number of dots	144 x 32	—
Module dimension	85.0 x30.0x13.2 (MAX)	mm
View area	66.0 x 16.0	mm
Active area	60.44 x 13.4	mm
Dot size	0.38 x 0.38	mm
Dot pitch	0.42 x 0.42	mm
LCD type	STN Negative, Blue Transmissive (In LCD production, It will occur slightly color difference. We can only guarantee the same color in the same batch.)	
Duty	1/32	
View direction	6 o'clock	
Backlight Type	LED White	
IC	ST7920	

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4.Absolute Maximum Ratings

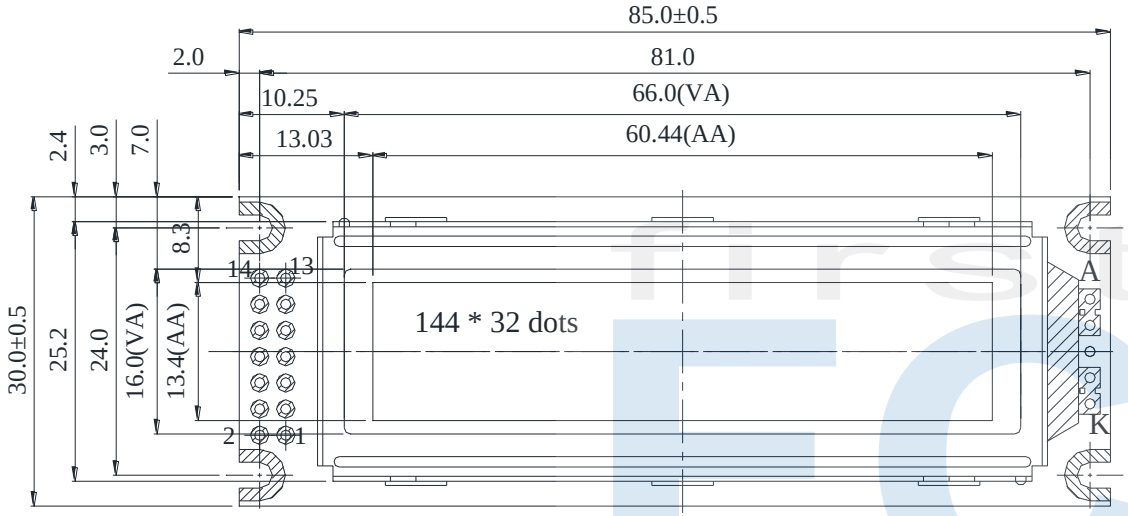
Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Input Voltage	V_{IN}	-0.3	—	V_{DD}+0.3	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	—	5.5	V
Supply Voltage For LCD	V_O-V_{SS}	0	—	7.0	V

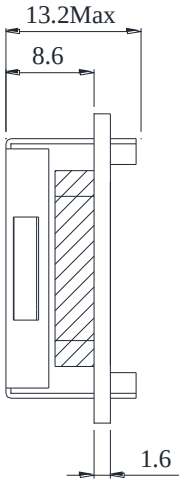
7.Interface Pin Function

Pin No.	Symbol	Level	Description
1	VDD	5.0V	Supply voltage for logic
2	VSS	0V	Ground
3	Vo	—	Supply voltage for LCD
4	RS	—	H: Data , L : Instruction
5	R/W	H/L	H: Read (Module --> MPU) L: Write(MPU --> Module)
6	E	H/L	ENABLE SIGNAL
7	DB0	H/L	Data bus line
8	DB1	H/L	Data bus line
9	DB2	H/L	Data bus line
10	DB3	H/L	Data bus line
11	DB4	H/L	Data bus line
12	DB5	H/L	Data bus line
13	DB6	H/L	Data bus line
14	DB7	H/L	Data bus line

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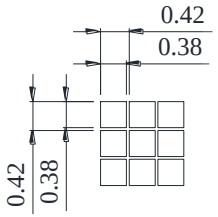
8.Contour Drawing &Block Diagram



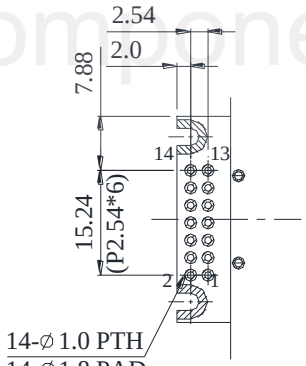


LED B/L

PIN NO.	SYMBOL
1	Vdd
2	Vss
3	V0
4	RS
5	R/W
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7



DOT SIZE
SCALE 10/1



14-∅1.0 PTH
14-∅1.8 PAD
PIN DETAIL

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

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