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.: WG12864BP1-TFH-V#N

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

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY

VERSION	DATE	REVISED PAGE NO.	SUMMARY
K	2019/08/27		Modify Material List of Components for RoHs

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	128 x 64	—
Module dimension	75.0 x 52.7 x 8.9 (MAX)	mm
View area	58.8 x 31.4	mm
Active area	55.01 x 27.49	mm
Dot size	0.40 x 0.40	mm
Dot pitch	0.43 x 0.43	mm
LCD type	FSTN Positive Transflective (In LCD production, It will occur slightly color difference. We can only guarantee the same color in the same batch.)	
Duty	1/64	
View direction	6 o'clock	
Backlight Type	LED, White	
IC	NT7107, NT7108	

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4.Absolute Maximum Ratings

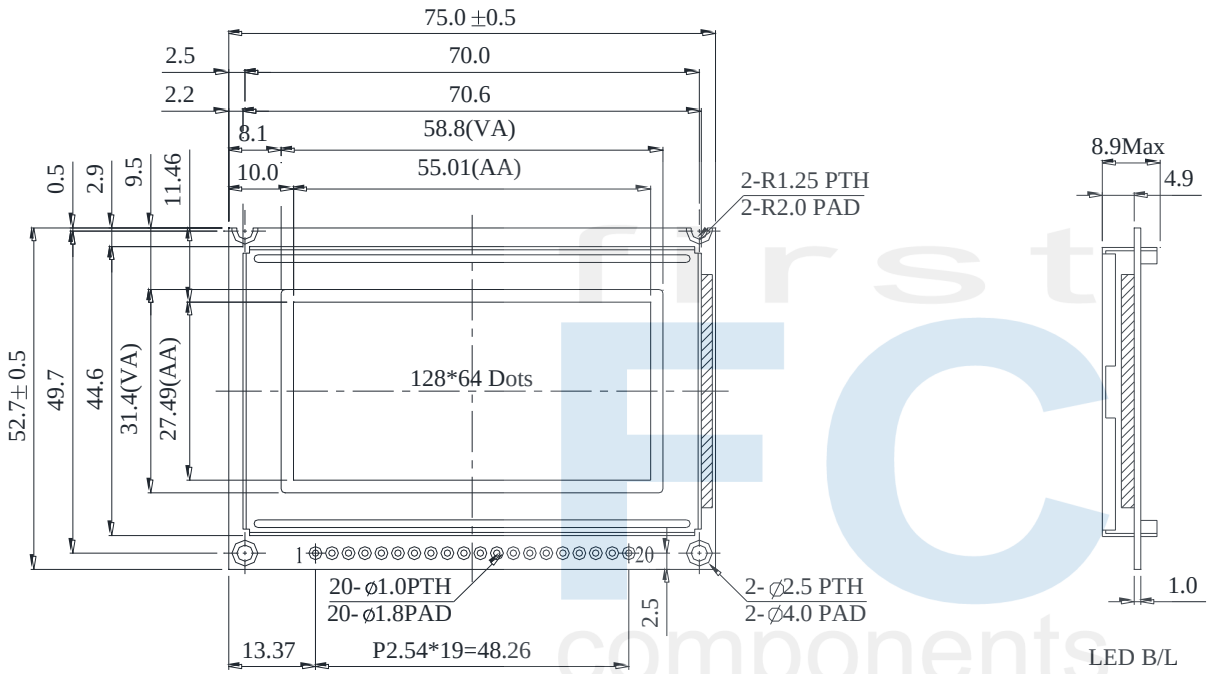
Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	—	7.0	V
Driver Supply Voltage	V_{LCD}	V_{EE}-0.3	—	V_{DD}+0.3	V

7.Interface Pin Function

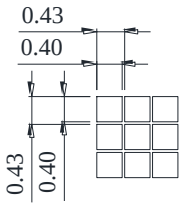
Pin No.	Symbol	Level	Description
1	V_{DD}	—	Supply voltage for logic
2	V_{SS}	0V	Ground
3	V_o	(Variable)	Contrast Adjustment
4	DB0	H/L	Data bus line
5	DB1	H/L	Data bus line
6	DB2	H/L	Data bus line
7	DB3	H/L	Data bus line
8	DB4	H/L	Data bus line
9	DB5	H/L	Data bus line
10	DB6	H/L	Data bus line
11	DB7	H/L	Data bus line
12	CS1	L	Select Column 1~ Column 64
13	CS2	L	Select Column 65~ Column 128
14	/RST	L	Reset signal
15	R/₩	H/L	H: Read (MPU←Module) , L: Write (MPU→Module)
16	D/I	H/L	H: Data , L : Instruction
17	E	H	Enable signal
18	Vee	—	Negative Voltage output
19	A	—	Power Supply for LED backlight (+)
20	K	—	Power Supply for LED backlight (-)

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8.Contour Drawing &Block Diagram



PIN NO.	SYMBOL
1	Vdd
2	Vss
3	Vo
4	DB0
5	DB1
6	DB2
7	DB3
8	DB4
9	DB5
10	DB6
11	DB7
12	CS1
13	CS2
14	$\overline{RST}$
15	R/$\overline{W}$
16	D/$\overline{I}$
17	E
18	Vee
19	A
20	K



DOT SIZE
SCALE 10/1

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