LCD / LCM SPECIFICATION

RAYSTAR Optronics, Inc.
曜凌光電股份有限公司

曜凌光電股份有限公司
Raystar Optronics, Inc.
T: +886-4-2565-0761 | F: +886-4-2565-0760
salescontact@raystar-optronics.com | www.raystar-optronics.com

RC2002B

General Specification

The features is described as follow:

- Module Dimension: 89.0 x 21.5 x 9.0 (max.) mm
- View Area: 75.0 x 15.0 mm
- Active Area: 68.5 x 10.7 mm
- Number of Characters: 20 Characters x 2 Lines
- Dot Size: 0.55 x 0.60 mm
- Dot Pitch: 0.60 x 0.65 mm
- Character Size: 2.95 x 5.15 mm
- Character Pitch: 3.45 x 5.55 mm
- Duty: 1/16
- Backlight Type: LED
- IC:ST7066U
- Interface:68 series

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Interface Pin Function

Pin No.	Symbol	Level	Description
1	NC	—	No connection
2	NC	—	No connection
3	V_{SS}	0V	Ground
4	V_{DD}	5.0V	Supply Voltage for logic
5	VO	(Variable)	Operating voltage for LCD
6	RS	H/L	H: DATA, L: Instruction code
7	R/W	H/L	H: Read (Module --> MPU) L: Write(MPU --> Module)
8	E	H,H→L	Chip enable signal
9	DB0	H/L	Data bus line
10	DB1	H/L	Data bus line
11	DB2	H/L	Data bus line
12	DB3	H/L	Data bus line
13	DB4	H/L	Data bus line
14	DB5	H/L	Data bus line
15	DB6	H/L	Data bus line
16	DB7	H/L	Data bus line
17	VLED+	—	Power supply for LED +
18	VLED-	—	Power supply for LED—
19	NC	—	No connection
20	NC	—	No connection

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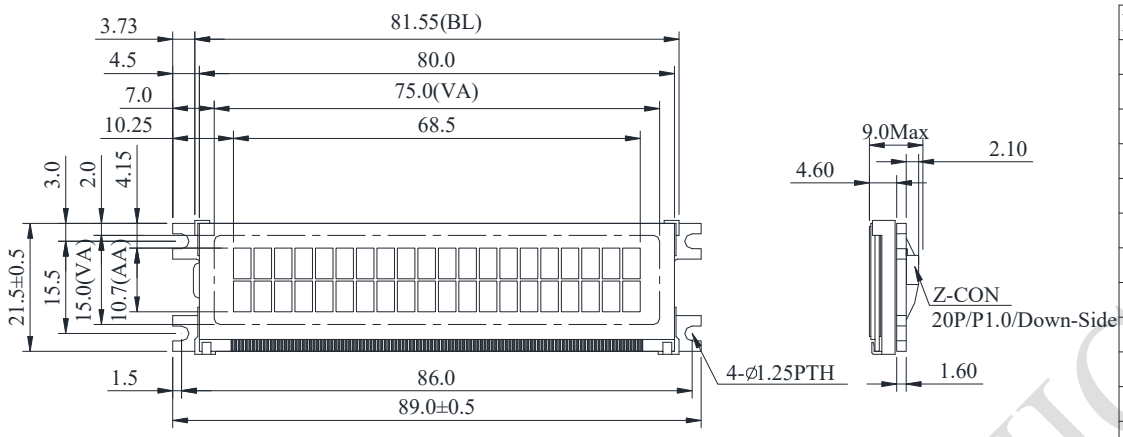
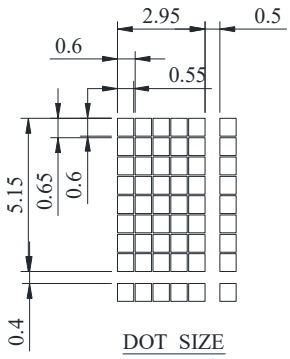
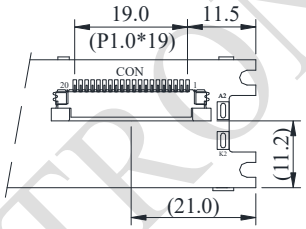
Contour Drawing





DOT SIZE
SCALE 5/1



CON DETAIL
Component Side

PIN NO.	SYMBOL
1	NC
2	NC
3	Vss
4	Vdd
5	Vo
6	RS
7	R/W
8	E
9	DB0
10	DB1
11	DB2
12	DB3
13	DB4
14	DB5
15	DB6
16	DB7
17	V_{LED+}
18	V_{LED-}
19	NC
20	NC

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

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Input Voltage	V_I	V_{SS}	—	V_{DD}	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	—	7	V
Supply Voltage For LCD	V_{DD}-V_o	-0.3	—	13	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	V_{DD}-V_{SS}	—	4.5	5.0	5.5	V
Supply Voltage For LCD	V_{DD}-V_0	Ta=-20℃	—	—	5.2	V
		Ta=25℃	4.1	4.2	4.3	V
		Ta=70℃	3.6	—	—	V
Input High Volt	V_{IH}	—	0.7 V_{DD}	—	V_{DD}	V
Input Low Volt	V_{IL}	—	Vss	—	0.6	V
Output High Volt	V_{OH}	—	3.9	—	V_{DD}	V
Output Low Volt	V_{OL}	—	0	—	0.4	V
Supply Current	I_{DD}	V_{DD}=5.0V	1.0	1.2	1.5	mA

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