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

RG12232E1

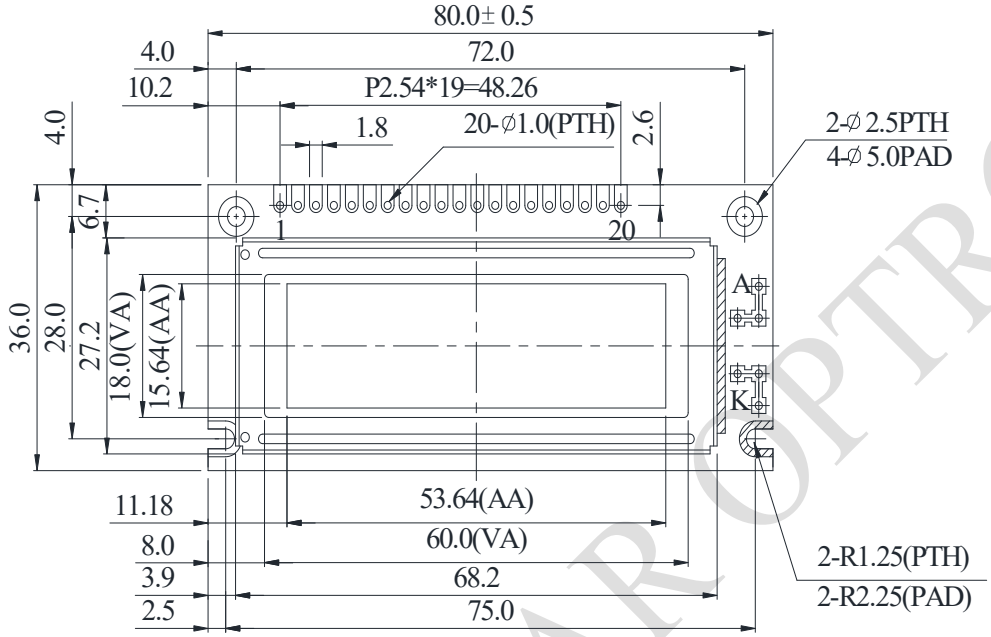
General Specification

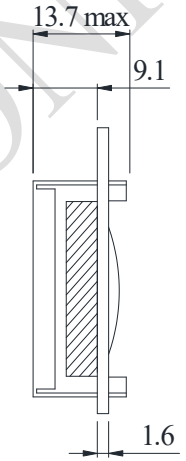
- Module dimension: 80.0 x 36.0 x 13.7 (max.) mm
- View area: 60.0 x 18.0 mm
- Active area: 53.64 x 15.64 mm
- Number of dots: 122 x 32
- Dot size: 0.40 x 0.45 mm
- Dot pitch: 0.44 x 0.49 mm
- Duty: 1/32
- Backlight Type: LED
- IC: SBN1661G

Interface Pin Function

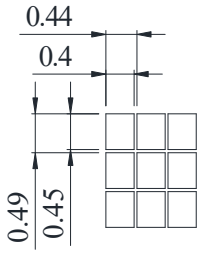
Pin No.	Symbol	Level	Description
1	V_{ss}	0V	GND
2	V_{dd}	3.0V	Power supply for logic
3	Vo	(Variable)	Contrast Adjustment
4	A0	H/L	H : Data L : Instruction
5	E1	H/L	Chip Enable for IC1
6	E2	H/L	Chip Enable for IC2
7	NV	—	Negative Voltage option
8	NC	H/L	NO connection
9	R/ $\overline{W}$	H/L	H : Read data; L : Write data
10	DB0	H/L	Data bus line
11	DB1	H/L	Data bus line
12	DB2	H/L	Data bus line
13	DB3	H/L	Data bus line
14	DB4	H/L	Data bus line
15	DB5	H/L	Data bus line
16	DB6	H/L	Data bus line
17	DB7	H/L	Data bus line
18	RES	H/L	Reset the LCM
19	A		LED +
20	K		LED -

Contour Drawing





LED B/L



DOT SIZE
SCALE 10/1

PIN NO.	SYMBOL
1	Vss
2	Vdd
3	Vo
4	A0
5	E1
6	E2
7	NV
8	NC
9	R/$\overline{W}$
10	DB0
11	DB1
12	DB2
13	DB3
14	DB4
15	DB5
16	DB6
17	DB7
18	$\overline{RES}$
19	A
20	K

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	-0.3	–	V_{DD}+0.3	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	–	+6.0	V
LCD bias voltage	V_{LCD}	3.5	–	13	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	V_{DD}-V_{SS}	–	2.7	3.3	3.6	V
Supply Voltage For LCD	V_{DD}-V_0	Ta=-20℃	–	–	–	V
		Ta=25℃	4.2	4.35	4.5	V
		Ta=+70℃	–	–	–	V
Input High Volt.	V_{IH}	V_{DD} =3.3	2.7	3.3	V_{DD}+0.5	V
Input Low Volt.	V_{IL}	–	0	0.7	1.1	V
Output High Volt.	V_{OH}	–	V_{DD}-0.3	–	V_{DD}	V
Output Low Volt.	V_{OL}	–	0	–	0.3	V
Supply Current	I_{DD}	V_{DD}=3.0V	1.2	1.5	1.8	mA