



RAYSTAR

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

RG12232C

General Specification

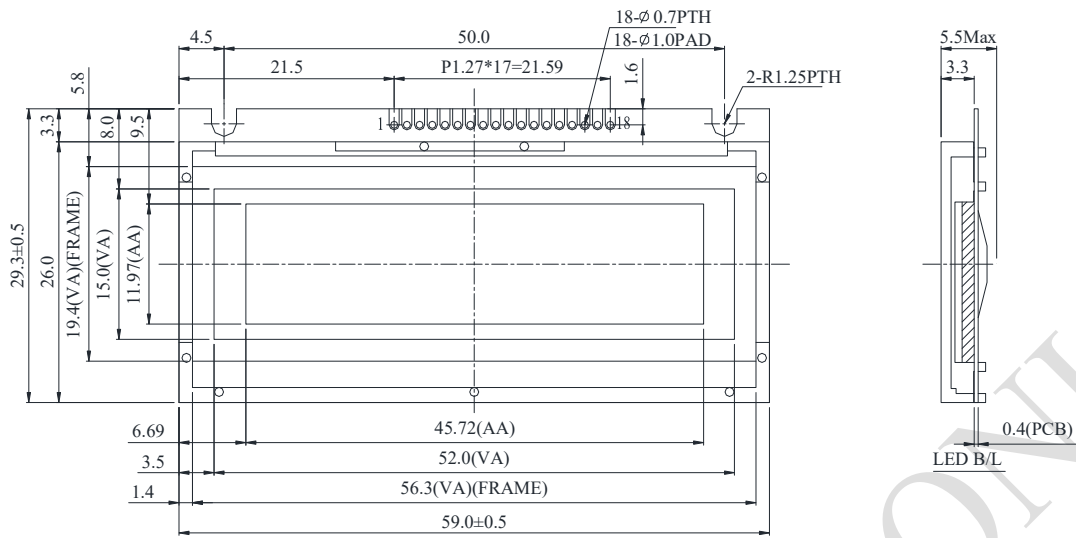
The Features is described as follow:

- Module dimension: 59.0 x 29.3 x 5.5 (max.) mm
- View area: 52.0 x 15.0 mm
- Active area: 45.72 x 11.97 mm
- Number of dots: 122 x 32
- Dot size: 0.345 x 0.345 mm
- Dot pitch: 0.375 x 0.375 mm
- Duty: 1/32
- Backlight Type: LED
- IC: SBN1661G

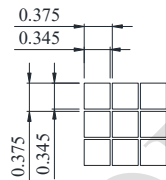
Interface Pin Function

Pin No.	Symbol	Level	Description
1	/VLED	0V	B/L Selected
2	VSS	0V	Ground
3	VDD	5.0V	Power supply for logic
4	Vo	(Variable)	Contrast Adjustment
5	A0	H/L	H : Data L : Instruction
6	E1	H/L	Chip select signal for IC1 (left 61*32 dots) active "H"
7	E2	H/L	Chip select signal for IC2 (right 61*32 dots) active "H"
8	DB0	H/L	Data bus line
9	DB1	H/L	Data bus line
10	DB2	H/L	Data bus line
11	DB3	H/L	Data bus line
12	DB4	H/L	Data bus line
13	DB5	H/L	Data bus line
14	DB6	H/L	Data bus line
15	DB7	H/L	Data bus line
16	R/W	H/L	H : Read ; L : Write
17	Vee	—	Negative voltage output
18	NC	—	No connection

Contour Drawing



PIN NO.	SYMBOL
1	VLED
2	VSS
3	VDD
4	VO
5	AO
6	E1
7	E2
8	DB0
9	DB1
10	DB2
11	DB3
12	DB4
13	DB5
14	DB6
15	DB7
16	R/W
17	VEE
18	NC



DOT SIZE
SCALE 15/1

The non-specified tolerance of dimension is \pm 0.3mm.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	°C
Storage Temperature	T_{ST}	-30	—	+80	°C
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	$V_{DD}-V_{SS}$	—	4.5	5.0	5.5	V
Supply Voltage For LCD	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	5.8	V
		$T_a=25^{\circ}\text{C}$	4.2	4.35	4.5	V
		$T_a=+70^{\circ}\text{C}$	3.9	—	—	V
Input High Volt.	V_{IH}	$V_{DD}=5.0$	3.0	5.0	$V_{DD}+0.5$	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}	$V_{DD}=5.0\text{V}$	—	0.5	1.5	mA