



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.

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## RG192128C

### General Specification

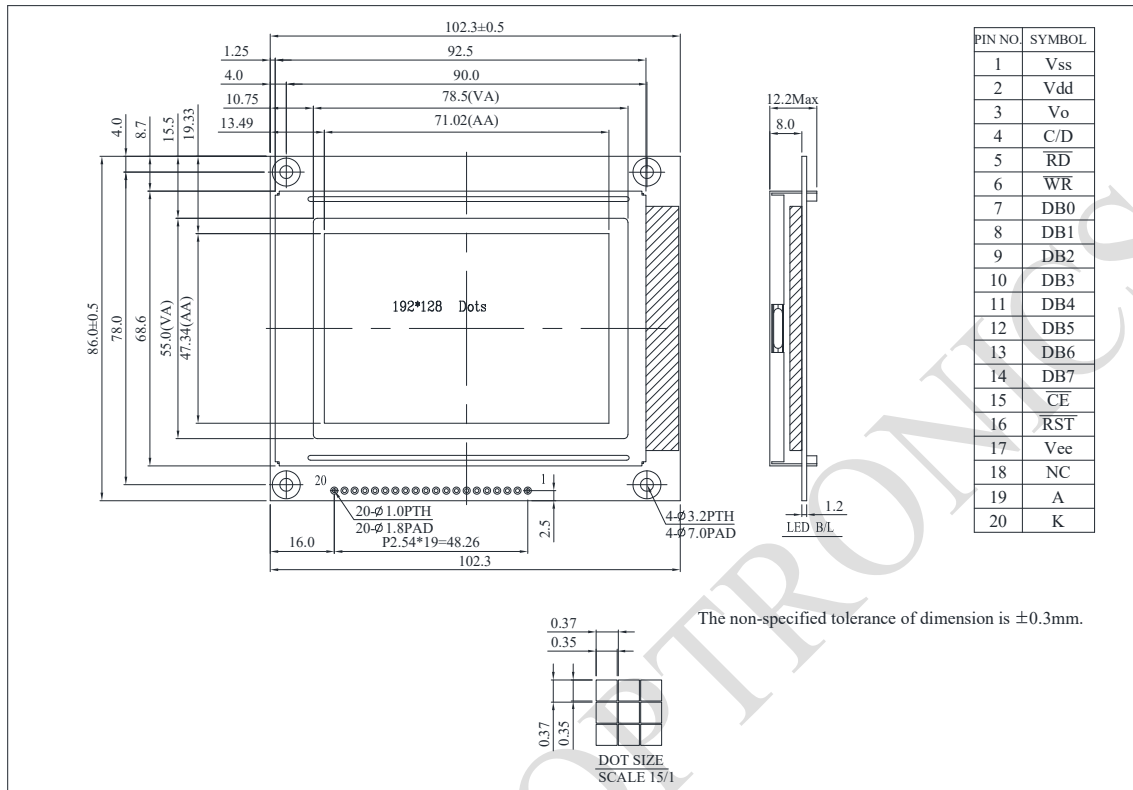
The Features of the Module is description as follow:

- Module dimension: 102.3 x 86.0 x 12.2 (max.) mm
- View area: 78.5 x 55.0 mm
- Active area: 71.02 x 47.34 mm
- Number of Dots: 192 x 128
- Dot size: 0.35 x 0.35 mm
- Dot pitch: 0.37 x 0.37 mm
- Duty: 1/128
- Backlight Type: LED
- IC:RA6963
- Interface:80 series

## Interface Pin Function

Pin No.	Symbol	Level	Description
1	Vss	—	Ground
2	Vdd	5.0V	Power supply for logic circuit
3	Vo	—	Contrast Adjustment
4	C/D	H / L	WR=L , C/D=H : Command Write C/D=L: Data write RD=L , C/D=H : Status Read C/D=L: Data read
5	/RD	L	Data read. Read data from RA6963 when RD = L
6	/WR	L	Data write. Write data into RA6963 when /WR = L
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
15	/CE	L	Chip enable the controller RA6963
16	/RST	L	Reset Signal
17	Vee	—	Negative Voltage Output
18	NC	—	No connection
19	A	—	Power supply for B/L(+)
20	K	—	Power supply for B/L(-)

# Contour Drawing



## 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	$V_{IN}$	-0.3	—	$V_{DD}+0.3$	V
Supply Voltage For Logic	$V_{DD}-V_{SS}$	-0.3	—	+7.0	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	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	—	V
		$T_a=25^{\circ}\text{C}$	14.7	15.2	15.7	V
		$T_a=+70^{\circ}\text{C}$	—	—	—	V
Input High Volt.	$V_{IH}$	—	$0.8 V_{DD}$	—	$V_{DD}$	V
Input Low Volt.	$V_{IL}$	—	0	—	$0.15 V_{DD}$	V
Output High Volt.	$V_{OH}$	—	$V_{DD}-0.3$	—	$V_{DD}$	V
Output Low Volt.	$V_{OL}$	—	0	—	0.3	V
Supply Current	$I_{DD}$	$V_{DD}=5.0\text{V}$	—	21.0	—	mA