



RAYSTAR

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RC1602A

General Specification

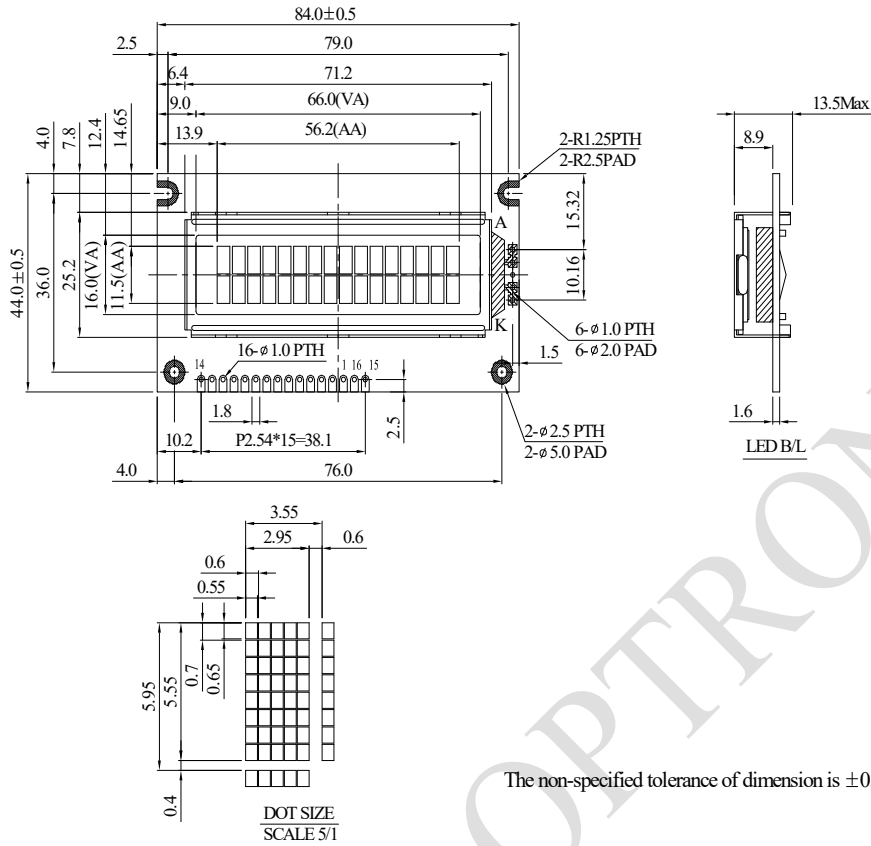
The Features is described as follow:

- Module dimension: 84.0 x 44.0 x 13.5 (max.) mm
- View area: 66.0 x 16.0 mm
- Active area: 56.2 x 11.5 mm
- Number of Characters: 16 characters x 2Lines
- Dot size: 0.55 x 0.65 mm
- Dot pitch: 0.60 x 0.70 mm
- Character size: 2.95 x 5.55 mm
- Character pitch: 3.55 x 5.95 mm
- Duty: 1/16
- Backlight Type: LED
- IC: ST7066U
- Interface:68 series

Interface Pin Function

Pin No.	Symbol	Level	Description
1	V _{SS}	0V	Ground
2	V _{DD}	3.3V	Supply Voltage for logic
3	VO	(Variable)	Operating voltage for LCD
4	RS	H/L	H: DATA, L: Instruction code
5	R/W	H/L	H: Read (Module --> MPU) L: Write(MPU --> Module)
6	E	H,H→L	Chip enable signal
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	V _{ee}	—	Negative Voltage Output
16	NC	—	No Connection

Contour Drawing



PIN NO.	SYMBOL
1	Vss
2	Vdd
3	Vo
4	RS
5	R/W
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	Vee
16	NC

The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.

DOT SIZE
SCALE 5/1

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	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	$V_{DD}-V_{SS}$	—	3.0	3.3	3.6	V
Supply Voltage For LCD	$V_{DD}-V_o$	$T_a=-20^{\circ}\text{C}$	—	—	5.2	V
		$T_a=25^{\circ}\text{C}$	3.6	3.7	3.8	V
		$T_a=70^{\circ}\text{C}$	3.2	—	—	V
Input High Volt.	V_{IH}	—	$0.7 V_{DD}$	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	V_{SS}	—	0.6	V
Output High Volt.	V_{OH}	—	$0.7 V_{DD}$	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	0	—	$0.2 V_{DD}$	V
Supply Current	I_{DD}	$V_{DD}=3.3\text{V}$	1.0	1.2	1.5	mA