LCD / LCM SPECIFICATION

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RG12232D

General Specification

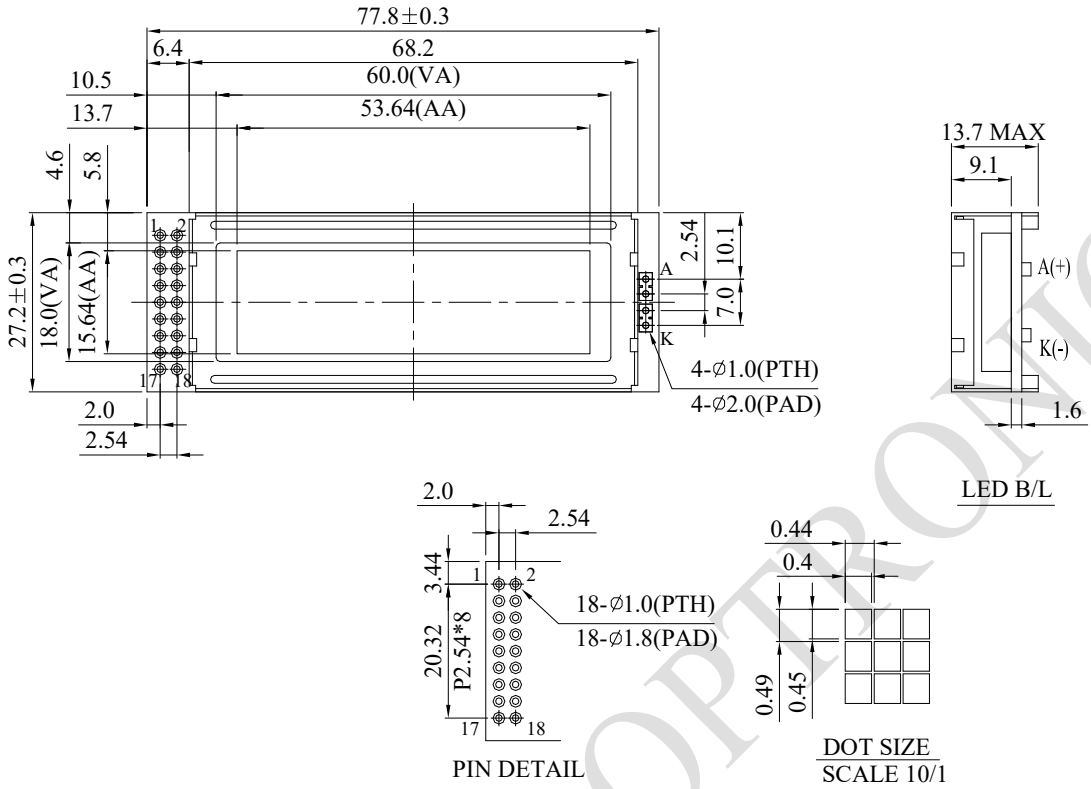
The Features is described as follow:

- Module dimension: 77.8 x 27.2 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: 0.4 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	Ground
2	V_{dd}	3.0V	Power supply for logic
3	Vo	(Variable)	Operating voltage for LCD
4	A0	H/L	H : Data L : Instruction
5	E1	H/L	Enable chip 1
6	E2	H/L	Enable chip 2
7	NC	—	NC
8	NC	—	NC
9	R/W	H/L	H : Read ; L : Write
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	RST	H/L	H -> L: The LCM be reset

Contour Drawing



PIN NO.	SYMBOL
1	Vss
2	Vdd
3	V0
4	A0
5	E1
6	E2
7	NC
8	NC
9	R/$\overline{W}$
10	DB0
11	DB1
12	DB2
13	DB3
14	DB4
15	DB5
16	DB6
17	DB7
18	$\overline{RST}$

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℃	4.3	4.45	4.6	V
		Ta=+70℃	–	–	–	V
Input High Volt.	V_{IH}	V_{DD} =3.3V	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}	–	–	1.0	–	mA