LCD / LCM SPECIFICATION

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RG14432D

General Specification

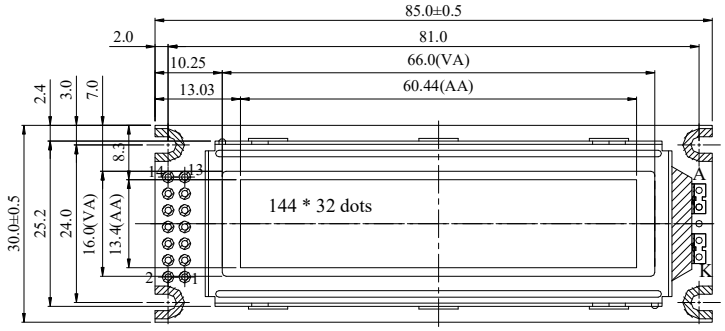
The Features is described as follow:

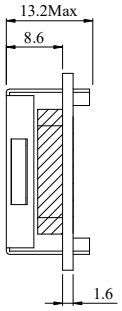
- Module dimension: 85.0x30.0x13.2 (max.) mm
- View area: 66.0 x 16.0 mm
- Active area: 60.44 x 13.4 mm
- Number of dots: 144 x 32
- Dot size: 0.38 x 0.38 mm
- Dot pitch: 0.42 x 0.42 mm
- Duty: 1/32
- Backlight Type: LED
- IC: ST7920
- Interface: 68 series

Interface Pin Function

Pin No.	Symbol	Level	Description
1	VDD	5.0V	Supply voltage for logic
2	VSS	0V	Ground
3	Vo	—	Supply voltage for LCD
4	RS	—	H: Data , L : Instruction
5	R/W	H/L	H: Read (Module --> MPU) L: Write(MPU --> Module)
6	E	H/L	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

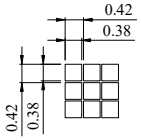
Contour Drawing



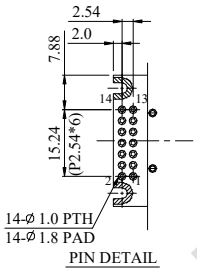


LED B/L

PIN NO.	SYMBOL
1	Vdd
2	Vss
3	V0
4	RS
5	R/W
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7



DOT SIZE
SCALE 10/1



14-Ø 1.0 PTH
14-Ø 1.8 PAD
PIN DETAIL

The non-specified tolerance of dimension is ±0.3mm.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	–	+70	℃
Storage Temperature	T_{ST}	-30	–	+80	℃
Input Voltage	V_{IN}	-0.3	–	V_{DD}+0.3	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	–	5.5	V
LCD Driver Voltage	V_{LCD}	-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_0-V_{SS}	Ta=-20℃	–	–	5.5	V
		Ta=25℃	4.2	4.4	4.6	V
		Ta=+70℃	3.8	–	–	V
Input High Volt.	V_{IH}	–	0.7V_{DD}	–	V_{DD}	V
Input Low Volt.	V_{IL}	–	-0.3	–	0.6	V
Output High Volt.	V_{OH}	–	0.8 V_{DD}	–	V_{DD}	V
Output Low Volt.	V_{OL}	–	–	–	0.4	V
Supply Current	I_{DD}	V_{DD}=5.0V	1.6	2.2	3.5	mA