LCD / LCM SPECIFICATION

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RC1602H

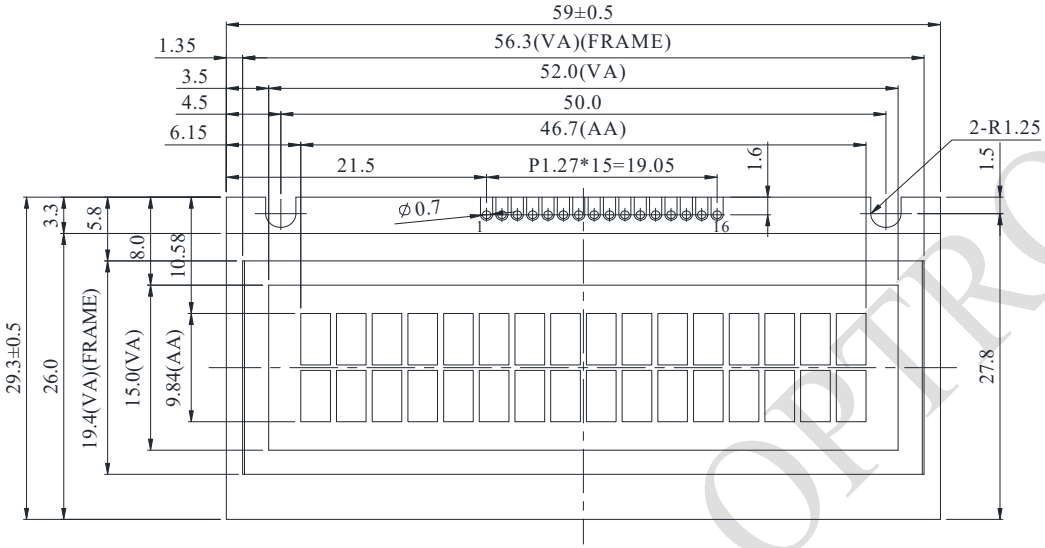
General Specification

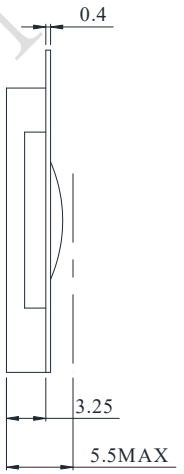
- Module dimension: 59.0 x 29.3 x 5.5 (max.) mm
- View area: 52.0 x 15.0 mm
- Active area: 46.7 x 9.84 mm
- Number of Characters: 16 characters x 2 Lines
- Dot size: 0.45 x 0.54 mm
- Dot pitch: 0.50 x 0.59 mm
- Character size: 2.45 x 4.67 mm
- Character pitch: 2.95 x 5.17 mm
- Duty: 1/16
- Backlight Type: Without backlight
- IC: ST7066U
- Interface:68 series

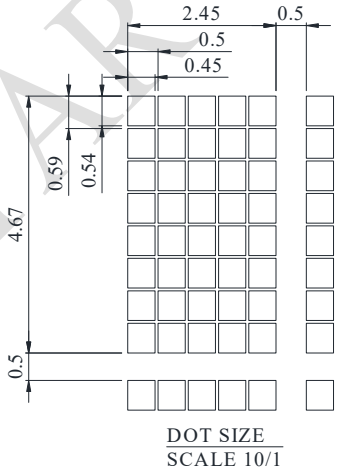
Interface Pin Function

Pin No.	Symbol	Level	Description
1	NC	—	No connection
2	V_{SS}	0V	Ground
3	V_{DD}	5.0V	Supply Voltage for logic
4	Vo	(Variable)	Operating voltage for LCD
5	RS	H/L	H: DATA, L: Instruction code
6	R/W	H/L	H: Read(MPU→Module) L: Write(MPU→Module)
7	E	H/L	Chip enable signal
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	NC	—	No connection

Contour Drawing







DOT SIZE
SCALE 10/1

PIN NO.	SYMBOL
1	NC
2	VSS
3	VDD
4	VO
5	RS
6	R/$\overline{W}$
7	E
8	DB0
9	DB1
10	DB2
11	DB3
12	DB4
13	DB5
14	DB6
15	DB7
16	NC

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

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	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}	–	4.5	5.0	5.5	V
Supply Voltage For LCD	V_{DD}-V_0	Ta=-20℃	–	–	–	V
		Ta=25℃	3.6	3.7	3.8	V
		Ta=70℃	–	–	–	V
Input High Volt.	V_{IH}	–	0.7 V_{DD}	–	V_{DD}	V
Input Low Volt.	V_{IL}	–	Vss	–	0.6	V
Output High Volt.	V_{OH}	–	3.9	–	V_{DD}	V
Output Low Volt.	V_{OL}	–	0	–	0.4	V
Supply Current	I_{DD}	V_{DD}=5.0V	1.0	1.2	1.5	mA