General Specification

Item	Dimension	Unit
Number of Characters	16 characters x 2 Lines	—
Module dimension	80.0 x 36.0 x 10.0(MAX)	mm
View area	66.0 x 16.0	mm
Active area	56.95 x 11.85	mm
Dot size	0.55 x 0.65	mm
Dot pitch	0.60x 0.70	mm
Character size	2.95 x 5.55	mm
Character pitch	3.6 x 6.3	mm
LCD type	OLED , Yellow	
Duty	1/16	

Absolute Maximum Ratings

Item	Symbol	Min	Max	Unit	Notes
Operating Temperature	T_{OP}	-40	+80	℃	
Storage Temperature	T_{ST}	-40	+80	℃	
Input Voltage	V_I	-0.3	VDD	V	
Supply Voltage For Logic	VDD-V_{SS}	-0.3	5.3	V	

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	VDD-VSS	—	3.0	5.0	5.3	V
Input High Volt.	VIH	—	0.9 VDD	—	VDD	V
Input Low Volt.	VIL	—	GND	—	0.1VDD	V
Output High Volt.	VOH	IOH=-0.5mA	0.8 VDD	—	VDD	V
Output Low Volt.	VOL	IOL=0.5mA	GND	—	0.2 VDD	V
Supply Current	IDD	VDD=5V	—	30	—	mA
CIEx(Yellow)		x,y(CIE1931)	0.44	0.48	0.52	
CIEy(Yellow)		x,y(CIE1931)	0.46	0.50	0.54	

Optical Characteristics

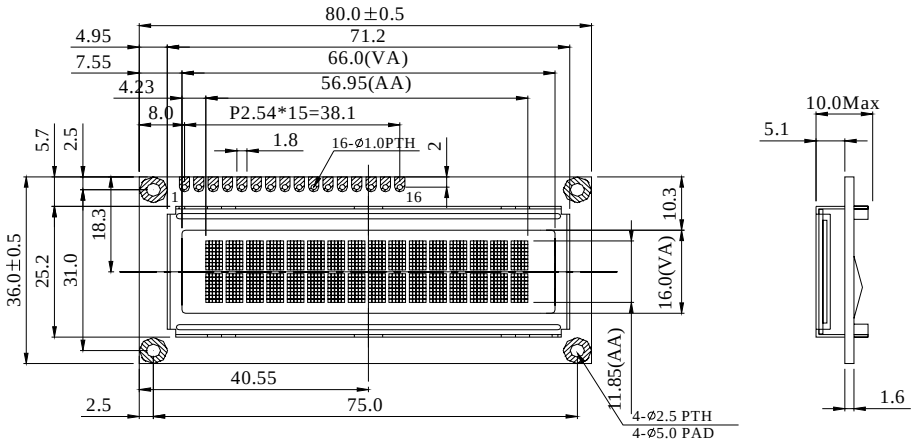
Item	Symbol	Condition	Min	Typ	Max	Unit
View Angle	(V)θ		160			deg
	(H)φ		160			deg
Contrast Ratio	CR	Dark	2000:1		—	—
Response Time	T rise	—		10		μs
	T fall	—		10		μs
Supply Voltage For Logic 5V 50% Check Board Brightness		With polarizer 150mW(5V*30mA)		125		nits Note1
Supply Voltage For Logic 3V 50% Check Board Brightness		With polarizer		80		nits

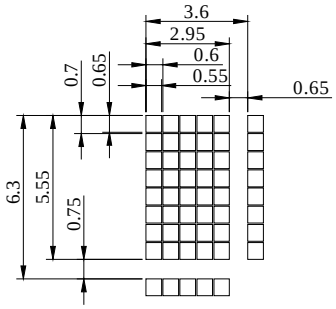
Notes: 1.When random texts pattern is running , averagely , at any instance , about 1/2 of pixels will be on.
2. You can to use the display off mode to make long life.

Interface Pin Function

Pin No.	Symbol	Level	Description
1	VSS	0V	Ground
2	VDD	5.0V	Supply Voltage for logic
3	NC	—	
4	RS	H/L	H: DATA, L: Instruction code
5	R/W	H/L	H: Read(MPU→Module) L: Write(MPU→Module)
6	E	H,H→L	Chip enable signal
7	DB0	H/L	Data bit 0
8	DB1	H/L	Data bit 1
9	DB2	H/L	Data bit 2
10	DB3	H/L	Data bit 3
11	DB4	H/L	Data bit 4
12	DB5	H/L	Data bit 5
13	DB6	H/L	Data bit 6
14	DB7	H/L	Data bit 7
15	NC	—	
16	NC	—	

Counter Drawing & Block Diagram

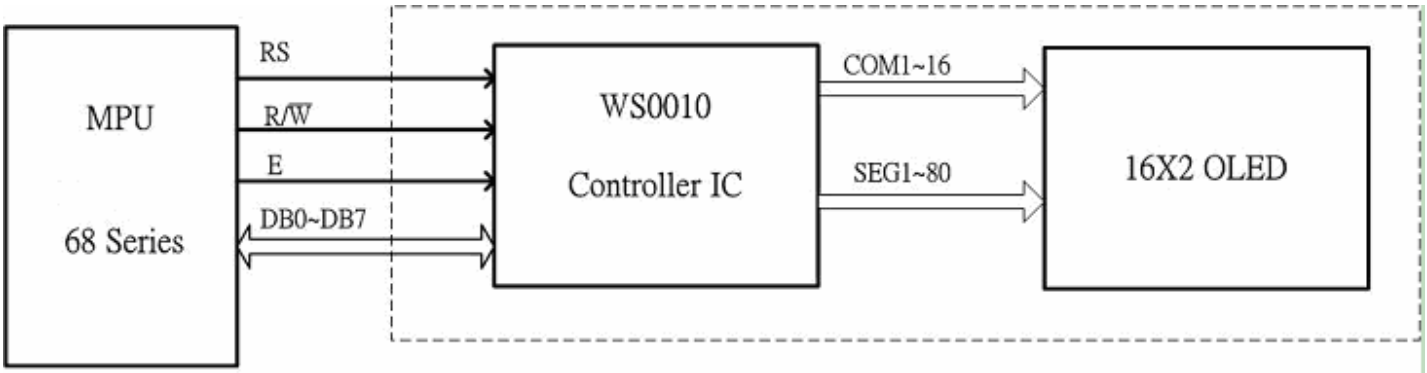




DOT SIZES
SCALE 5/1

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

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



Address Format	DB7	DB6	DB5	DB4	DB3	DB2	DB1	DB0
CA (Character Address)	1	ADD6	ADD5	ADD4	ADD3	ADD2	ADD1	ADD0

1	2	3	4	.....	.....	13	14	15	16
CA10000000	CA10000001	CA10000010	CA10000011	.....	.....	CA10001100	CA10001101	CA10001110	CA10001111
CA11000000	CA11000001	CA11000010	CA11000011	.....	.....	CA11001100	CA11001101	CA11001110	CA11001111