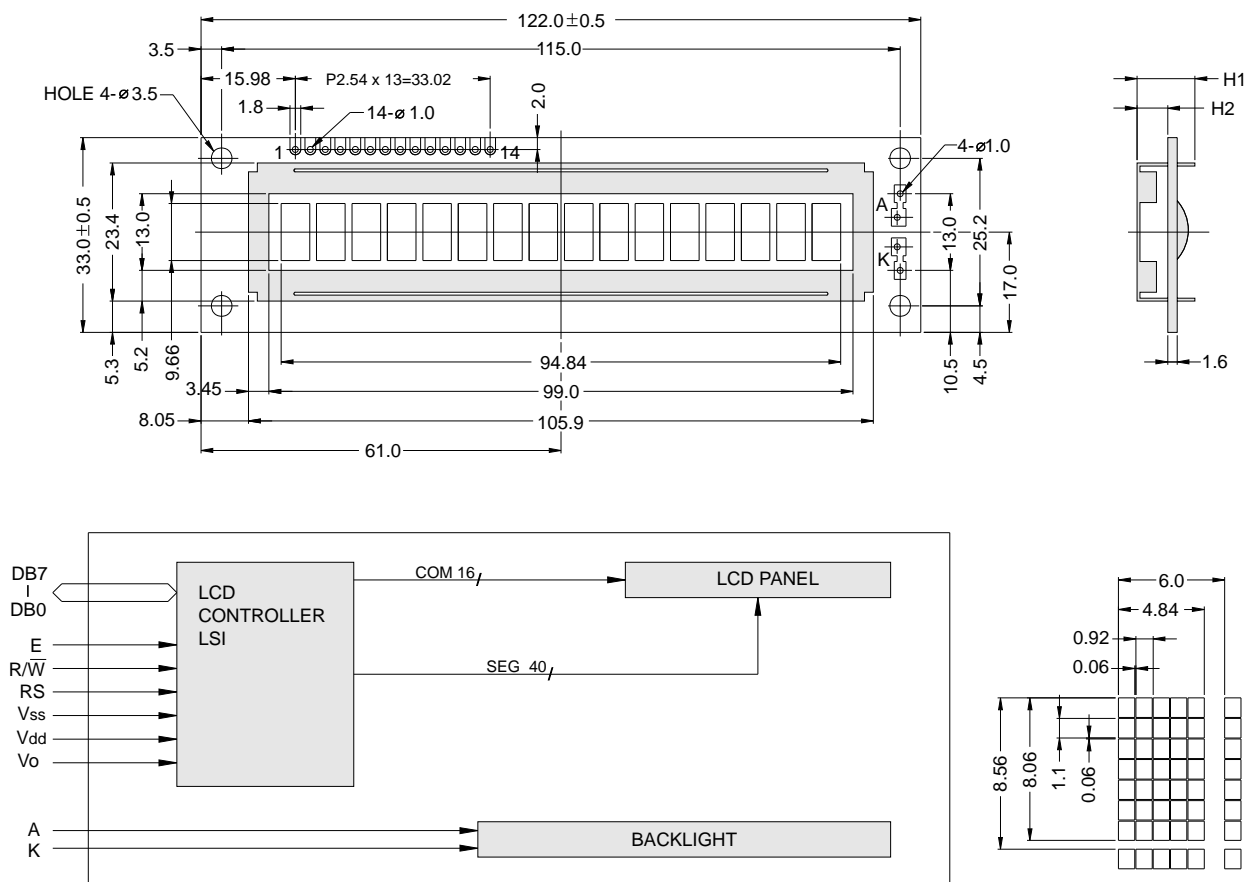




## OUTLINE DIMENSION & BLOCK DIAGRAM



The tolerance unless classified  $\pm 0.3\text{mm}$

### MECHANICAL SPECIFICATION

Overall Size	122.0 x 33.0	Module	H2 / H1
View Area	99.0 x 13.0	W / O B/L	5.2 / 9.8
Dot Size	0.92 x 1.10	EL B/L	5.2 / 9.8
Dot Pitch	0.98 x 1.16	LED B/L	8.9 / 13.5

### PIN ASSIGNMENT

Pin no.	Symbol	Function
1	Vss	Power supply(GND)
2	Vdd	Power supply(+)
3	Vo	Contrast Adjust
4	RS	Register select signal
5	R/W	Data read / write
6	E	Enable signal
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line

### ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Units
Supply for logic voltage	Vdd-Vss	25°C	-0.3	7	V
LCD driving supply voltage	Vdd-Vee	25°C	-0.3	13	V
Input voltage	Vin	25°C	-0.3	Vdd+0.3	V

### ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Units
Power supply voltage	Vdd-Vss	25°C	2.7	—	5.5	V
LCD operation voltage	Vop	Top	N	W	N	W
		-20°C	—	7.1	—	7.9
		0°C	4.6	—	4.9	—
		25°C	4.2	6.1	4.4	6.4
		50°C	3.9	—	4.2	—
		70°C	—	5.7	—	6.3
LCM current consumption (No B/L)	Idd	Vdd=5V	—	1.5	2.5	mA
Backlight current consumption	LED/edge	VB/L=4.2V	—	—	—	mA
	LED/array	VB/L=4.2V	—	190	—	mA

## REMARK

LCD option: STN, TN, FSTN

Backlight Option: LED, EL Backlight feature, other Specs not available on catalog is under request.

