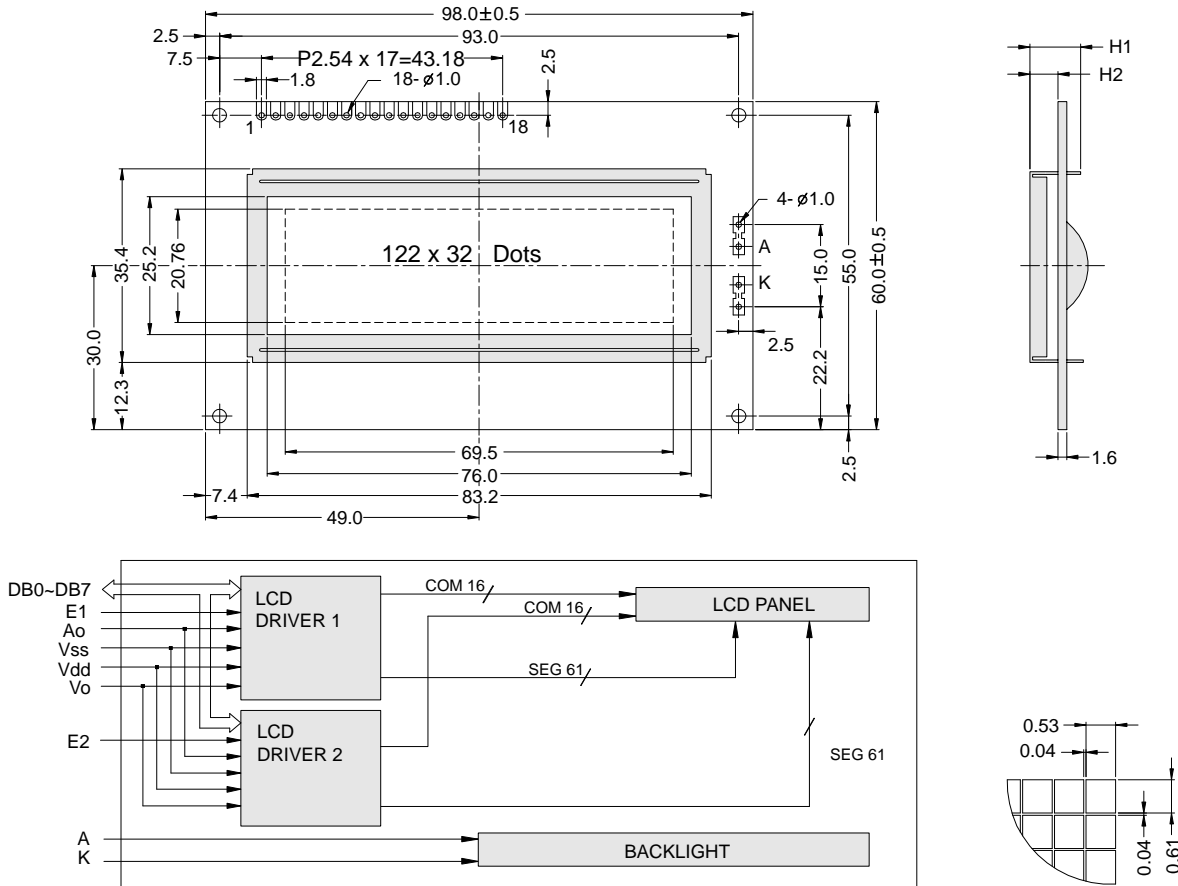


**OUTLINE DIMENSION & BLOCK DIAGRAM**



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

MECHANICAL SPECIFICATION			
Overall Size	98.0 x 60.0	Module	H2 / H1
View Area	76.0 x 25.2	W / O B/L	5.0 / 9.1
Dot Size	0.53 x 0.61	EL B/L	- / -
Dot Pitch	0.57 x 0.65	LED B/L	9.4 / 13.5

PIN ASSIGNMENT		
Pin no.	Symbol	Function
1	Vss	Power supply(GND)
2	Vdd	Power supply(+)
3	Vo	Contrast Adjust
4	Ao	Command / data select
5	E1	Enable driver 1
6	E2	Enable driver 2
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
15	A	Power supply for LED B/L (+)
16	K	Power supply for LED B/L (-)
17	N.C	No connection
18	N.C(R/W)	No connection (R/W)

ABSOLUTE MAXIMUM RATING									
Item	Symbol	Condition	Min.	Max.	Units				
Supply for logic voltage	Vdd-Vss	25°C	-0.3	8.0	V				
LCD driving supply voltage	Vdd-Vee	25°C	-0.3	16.5	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	V		
		-20°C	-	7.2	-	7.4	-	6.9	V
		0°C	4.9	-	5.1	-	4.6	-	V
		25°C	4.5	6.2	4.7	6.4	4.2	5.9	V
		50°C	3.5	-	3.7	-	3.3	-	V
70°C	-	5.6	-	5.8	-	5.4	V		
LCM current consumption (No B/L)	Idd	Vdd=5V	-	1.0	2.5	mA			
Backlight current consumption	LED/edge	VB/L=4.2V	-	-	-	mA			
	LED/array	VB/L=4.2V	-	260	-	mA			

**REMARK**

LCD option: STN, TN, FSTN

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

