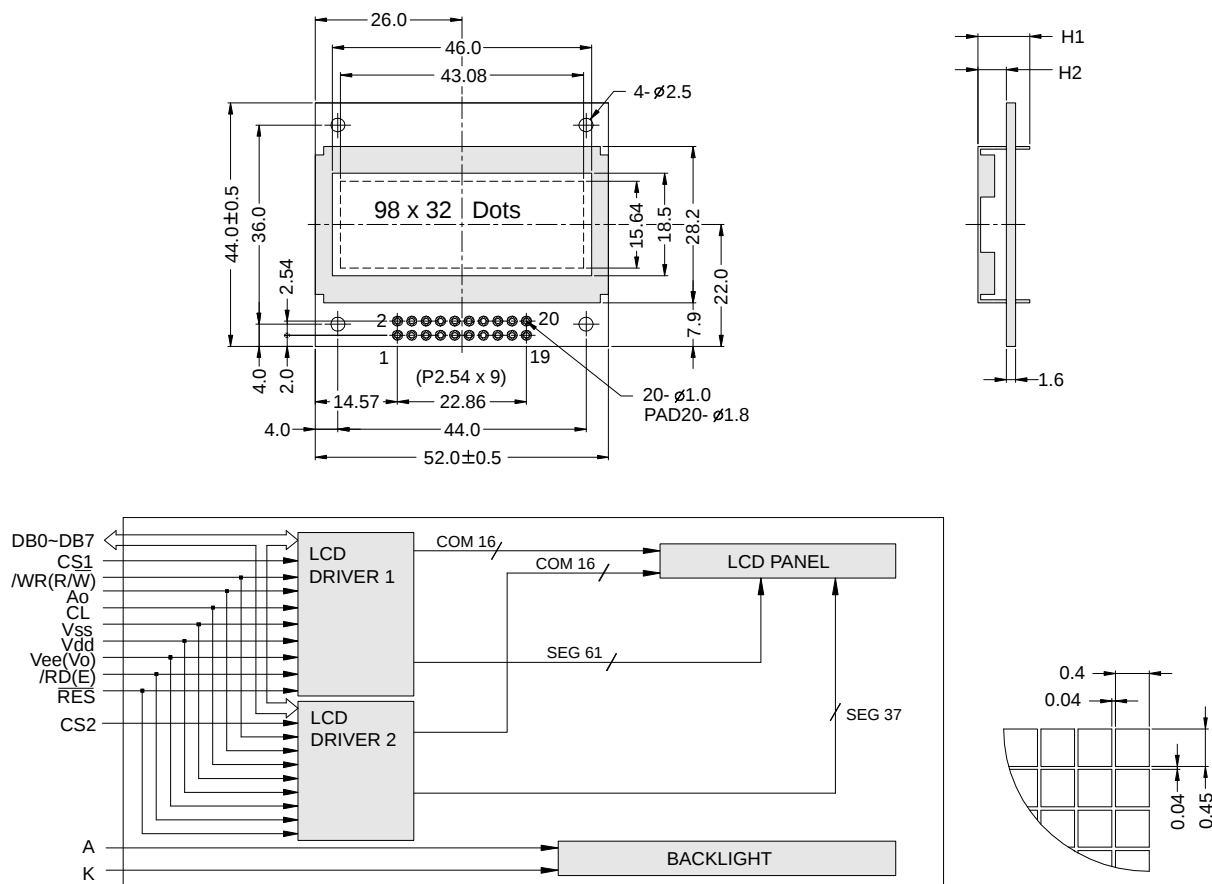




OUTLINE DIMENSION & BLOCK DIAGRAM



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

MECHANICAL SPECIFICATION			
Overall Size	52.0 x 44.0	Module	H2 / H1
View Area	46.0 x 18.5	W / O B/L	5.1 / 9.20
Dot Size	0.40 x 0.45	EL B/L	- / -
Dot Pitch	0.44 x 0.459	LED B/L	8.9 / 13.0

PIN ASSIGNMENT		
Pin no.	Symbol	Function
1	Vss	Power supply(GND)
2	Vdd	Power supply(+)
3	Vee(Vo)	Contrast Adjust
4	A0	Command / Data select
5	CS1	Chip select driver 1
6	CS2	Chip select driver 2
7	CL	External clock input
8	E	Enable signal
9	$R/\overline{W}$	Data read /write
10-17	DB0-DB7	Data bus line
18	$\overline{RES}$	Reset
19	A	Power supply for LED B/L (+)
20	K	Power supply for LED B/L (-)

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	N	W	V	
		-20°C	—	6.1	—	6.4	—	6.7	V	
		0°C	—	—	—	—	—	—	V	
		25°C	—	6	—	6.3	—	6.6	V	
		50°C	—	—	—	—	—	—	V	
		70°C	—	5.8	—	6.1	—	6.4	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	—		120		—		mA	

REMARK

LCD option: STN, TN, FSTN

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

