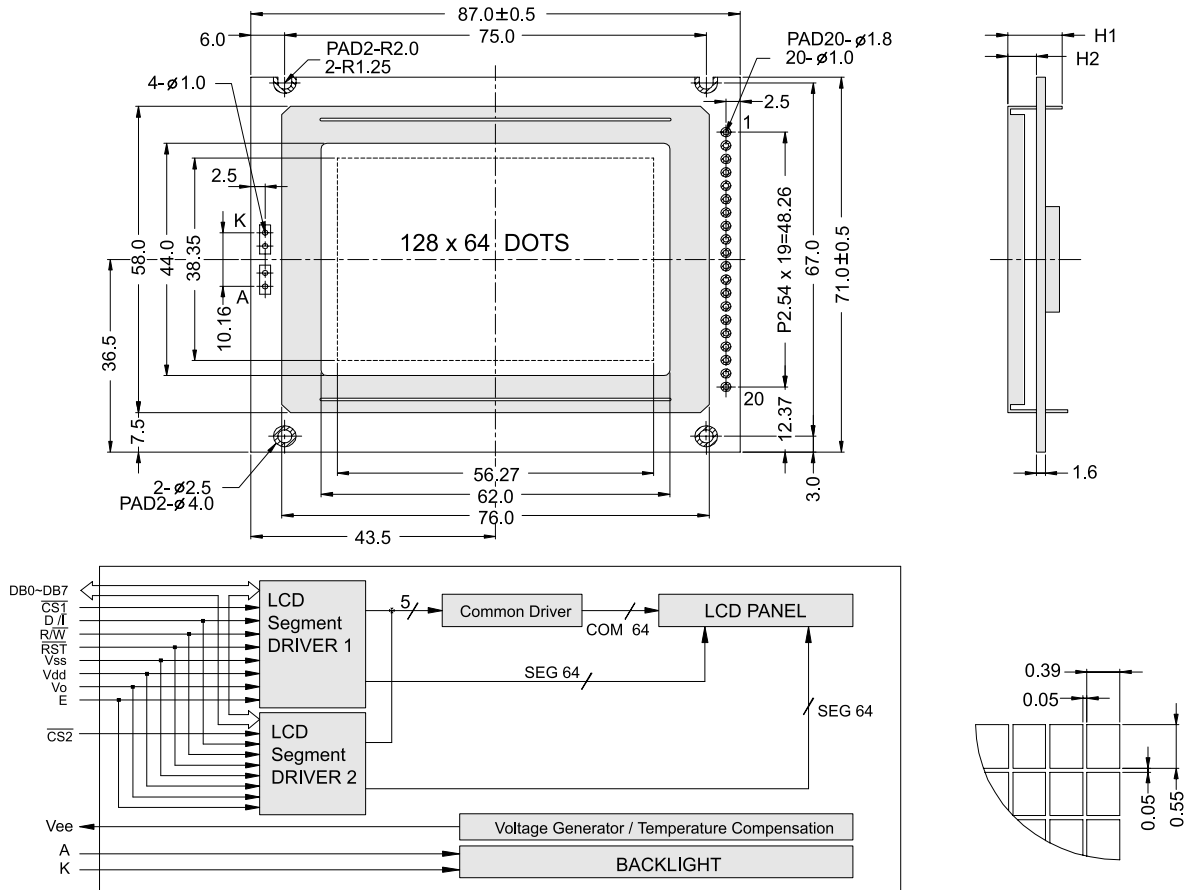


## OUTLINE DIMENSION & BLOCK DIAGRAM



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

MECHANICAL SPECIFICATION			
Overall Size	87.0 x 71.0	Module	H2 / H1
View Area	62.0 x 44.0	W / O B/L	5.1 / 9.7
Dot Size	0.39 x 0.55	EL B/L	5.1 / 9.7
Dot Pitch	0.44 x 0.60	LED B/L	9.2 / 13.8

PIN ASSIGNMENT		
Pin no.	Symbol	Function
1	Vss	Power supply(GND)
2	Vdd	Power supply(+)
3	Vo	Contrast Adjust
4	D / I	Command / data select
5	R/W	Data read / write
6	E	Chip enable signal
7-14	DB0-DB7	Data bus line
15	CS1	Chip select driver 1
17	RST	Reset
18	Vee	Negative voltage output
16	CS2	Chip select driver 1
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	7.0	V				
LCD driving supply voltage	Vdd-Vss	25°C	-0.3	19.0	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	4.5	-	5.5	V			
LCD operation voltage	Vop	Top	N	W	N	W	V		
		-20°C	-	8.6	-	9	-	9.5	V
		0°C	8.6	-	8.9	-	9.2	-	V
		25°C	8.1	8.6	8.4	9	8.7	9.5	V
		50°C	7.7	-	8	-	8.3	-	V
		70°C	-	8.0	-	8.4	-	7.8	V
LCM current consumption (No B/L)	Idd	Vdd=5V	-	2.5	5	mA			
Backlight current consumption	LED/edge	VB/L=4.2V	-	-	-	mA			
	LED/array	VB/L=4.2V	-	390	-	mA			