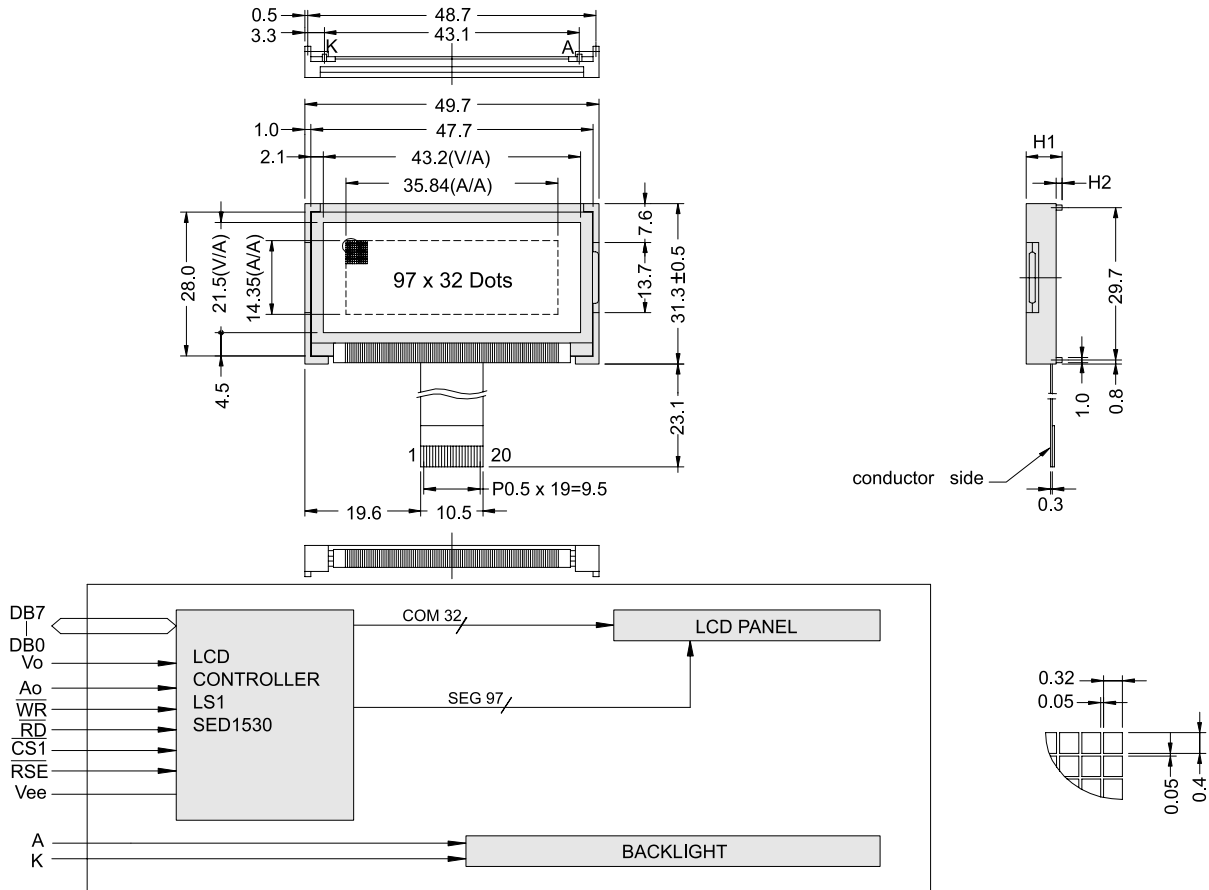


## OUTLINE DIMENSION & BLOCK DIAGRAM



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

MECHANICAL SPECIFICATION			
Overall Size	49.7 x 31.3	Module	H2 / H1
View Area	43.5 x 21.5	W / O B/L	- / -
Dot Size	0.32 x 0.40	EL B/L	- / -
Dot Pitch	0.37 x 0.45	LED B/L	5.1 / 6.1

PIN ASSIGNMENT		
Pin no.	Symbol	Function
1	Vss	Power supply(GND)
2	Vdd	Power supply(+)
3	Vo	Contrast Adjust
4	A0	Command / Data select
5	WR	Data write
6	RD	Data read
7-14	DB0-DB7	Data bus line
15	CS1	Chip select driver 1
16	RST	Reset
17	Vee	DC / DC booster output
18	NC	No connection
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-Vee	25°C	-0.3	18.0	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	2.7	-	5.5	V			
LCD operation voltage	Vop	Top	N	W	N	W	V		
		-20°C	-	6	-	6.4	-	6.8	V
		0°C	5.3	-	5.6	-	5.9	-	V
		25°C	5.1	5.8	5.4	6.2	5.7	6.6	V
		50°C	4.4	-	4.7	-	5	-	V
		70°C	-	5.6	-	5.9	-	6.2	V
LCM current consumption (No B/L)	Idd	Vdd=5V	-	0.5	1	mA			
Backlight current consumption	LED/edge	VB/L=2.1V	-	80	-	mA			
	LED/array	VB/L=4.2V	-	-	-	mA			