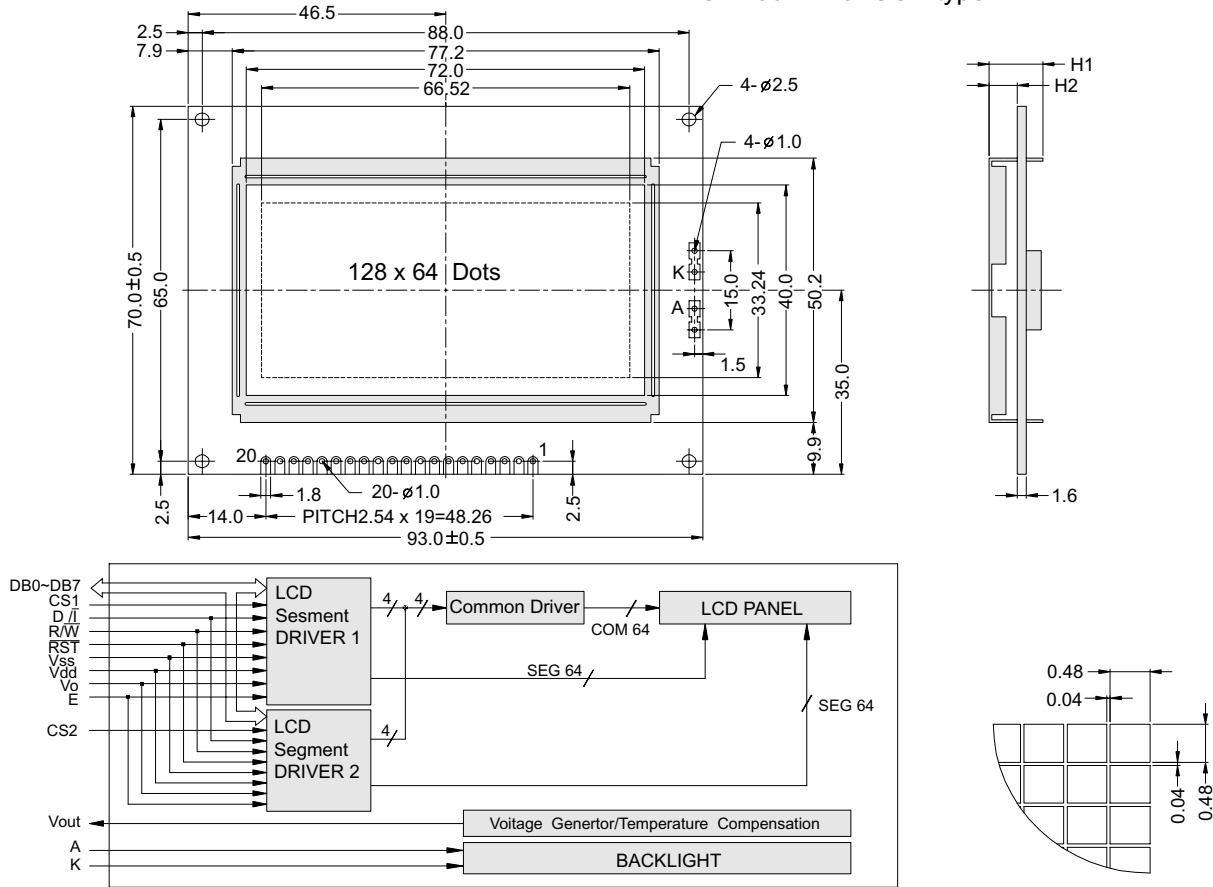




**OUTLINE DIMENSION & BLOCK DIAGRAM**

\*PG 12864-A for SMT type  
\*PG 12864-K for COB type



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

MECHANICAL SPECIFICATION			
Overall Size	93.0 x 70.0	Module	H2 / H1
View Area	72.0 x 40.0	W / O B/L	5.1 / 9.7
Dot Size	0.48 x 0.48	EL B/L	5.1 / 9.7
Dot Pitch	0.52 x 0.52	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	D/I	Command / data input
5	R/W	Data read / write
6	E	Enable signal
7-14	DB0-DB7	Data bus line
15	CS1	Chip selection driver 1
16	CS2	Chip selection driver 2
17	RST	Reset
18	Vout	Negative voutage output
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	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	—	14.3	—	14.7	—	15.1	V
		0°C	9.7	—	10.2	—	10.7	—	V
		25°C	8.9	13.2	9.4	13.6	9.9	14	V
		50°C	8.6	—	9.1	9.6	—	—	V
70°C	—	12	—	12.4	—	12.8	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			

**REMARK**

LCD option: STN, TN, FSTN

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

