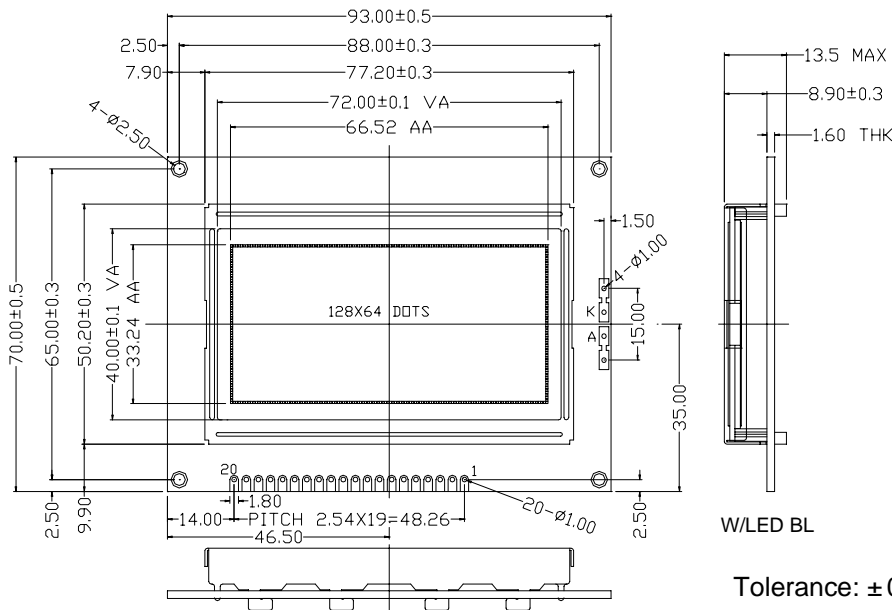
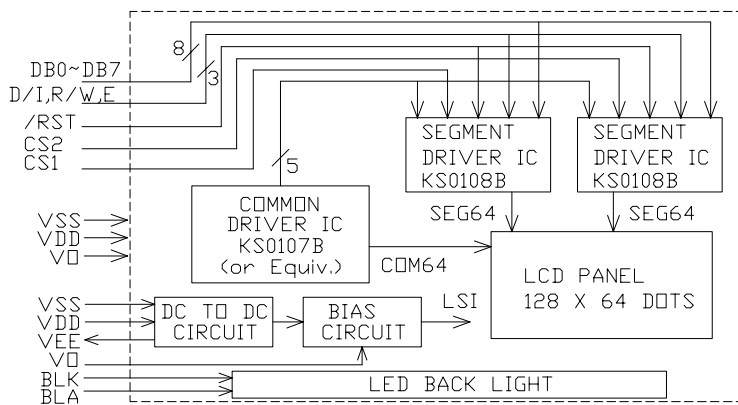


### OUTLINE DIMENSION

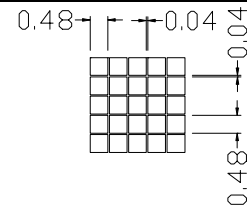


Tolerance: ±0.20mm, unless otherwise specified.

### BLOCK DIAGRAM



### DISPLAY PATTERN



### MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	93.0x70.0	MM
View Area	72.0x40.0	MM
Dot Size	0.48x0.48	MM
Dot Pitch	0.52x0.52	MM

### PIN ASSIGNMENT

Pin no	Symbol	Function
1	VSS	Power Supply(GND)
2	VDD	Power Supply(+)
3	VO	Contrast adjust
4	D/I	Data / Instruction signal
5	R/W	Read / Write signal
6	E	Clock
7~14	DB0~DB7	Data bus 0~7
15	CS1	Chip select signal for KS0108B(1)
16	CS2	Chip select signal for KS0108B(2)
17	/RST	Reset signal
18	VEE	Voltage booster output
19	BLA	Back light anode
20	BLK	Back light cathode

### ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min	Max	Unit
Supply for logic voltage	VDD	25°C	0	8.0	V
LCD driving supply voltage	VDD-VO	25°C	0	16.5	V
Input voltage	VI	25°C	VSS-0.3	VDD+0.3	V

### ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min	Typical	Max	Unit
Supply voltage for logic	VDD-VSS	---	4.5	5.0	5.5	V
Supply current for logic	IDD	VDD-VSS=5V	---	3.8	6.0	mA
Operation voltage for LCD	VDD-Vo	0°C	9.0	9.5	10.0	V
		25°C	8.6	9.3	9.7	V
		50°C	8.2	8.8	9.2	V
Input voltage " H " level	VIH	---	0.7VSS	---	VDD	V
Input voltage " L " level	VIL	---	VSS	---	0.3VDD	V
Supply voltage for back light	VF	---	---	4.2	4.6	V
Supply current for back light	IF	VF=4.2V	---	360	720	mA

### REMARKS:

1. LCD options: STN, FSTN.
2. Back light type: LED Back light feature.