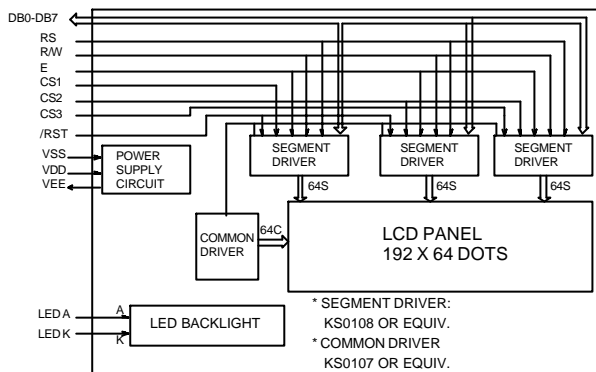
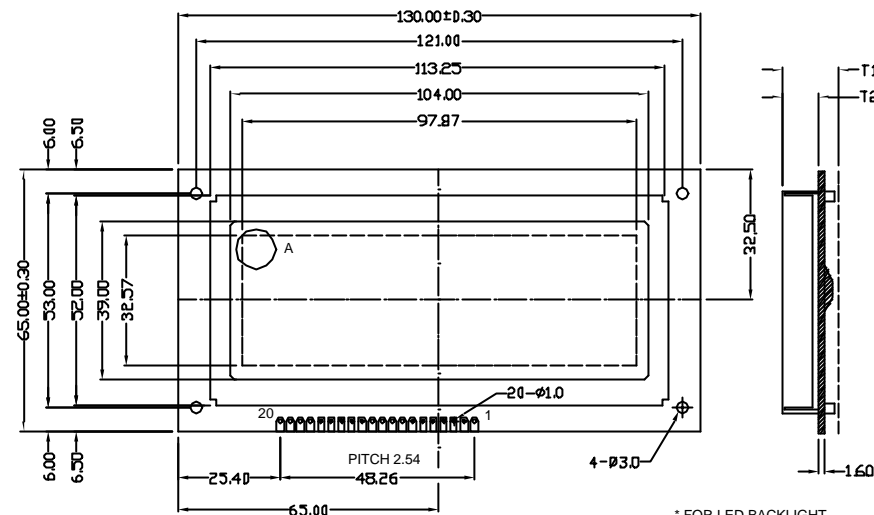


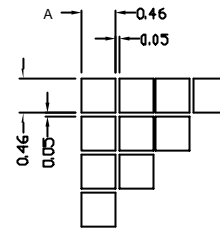
192 X 64  
DOTS

## OPTIONS

- \* LCD PANEL  
Yellow/Green  
or Gray STN
- \* View Angle  
12H or 6H
- \* Controller  
KS0108B



\* FOR LED BACKLIGHT  
T1=14.0MAX T2=9.0±0.3  
\* FOR EL OR NO BACKLIGHT  
T1=11.0MAX T2=6.0±0.3



All dimensions in mm. Tolerance +0.3mm unless otherwise specified.

### MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
Overall Size	130.0Wx65.0Hx10.0T(BL14.0T)	mm
Viewing Area	104.0Wx39.0H	mm
Dot Number	192Wx64H	dots
Dot Size	0.46Wx0.46H	mm
Dot Pitch	0.51Wx0.51H	mm

### PIN ASSIGNMENT

PIN	SYMBOL	FUNCTION
1	Vss	Power Supply(GND)
2	Vdd	Power Supply(+5V)
3	Vo	Contrast Adjust
4	RS	Instruction/Data Register Select
5	R/W	Data Read/Write
6	E	Enable Signal
7-14	DB0-DB7	Data Bus Line
15	CS1	Selection Signal for Chip1
16	/RST	Reset
17	CS2	Selection Signal for Chip2
18	CS3	Selection Signal for Chip3
19	VEE	Negative Voltage Output(-5V or -10V)

PIN	SYMBOL	FUNCTION
20	A	Power Supply For LED Backlight(4.2V)

### ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN.	MAX.	UNIT
Power Supply (Logic)	Vdd	-0.3	7.0	V
Power Supply (LCD)	Vo	Vdd-15.0	Vdd+0.3	V
Input Voltage	Vi	-0.3	Vdd	V
Operating Temperature	Topr	0	50	°C
Storage Temperature	Tstg	-20	70	°C

### ELECTRICAL CHARACTERISTICS(Ta=25°C, Vdd=5V±0.25V)

ITEM	SYMBOL	MIN.	Typ.	MAX.	UNIT
Power Supply(Logic)	Vdd	4.5	5.0	5.5	V
Supply Current	Idd	2.0	—	—	mA
LCD Driving Voltage	Vdd-Vo	—	9.0	—	V
Input Voltage "H"	Vih	2.2	—	Vdd	V
Input Voltage "L"	Vil	—	—	0.6	V
Output Voltage "H"	Voh	2.4	—	—	V
Output Voltage "L"	Vol	—	—	0.4	V