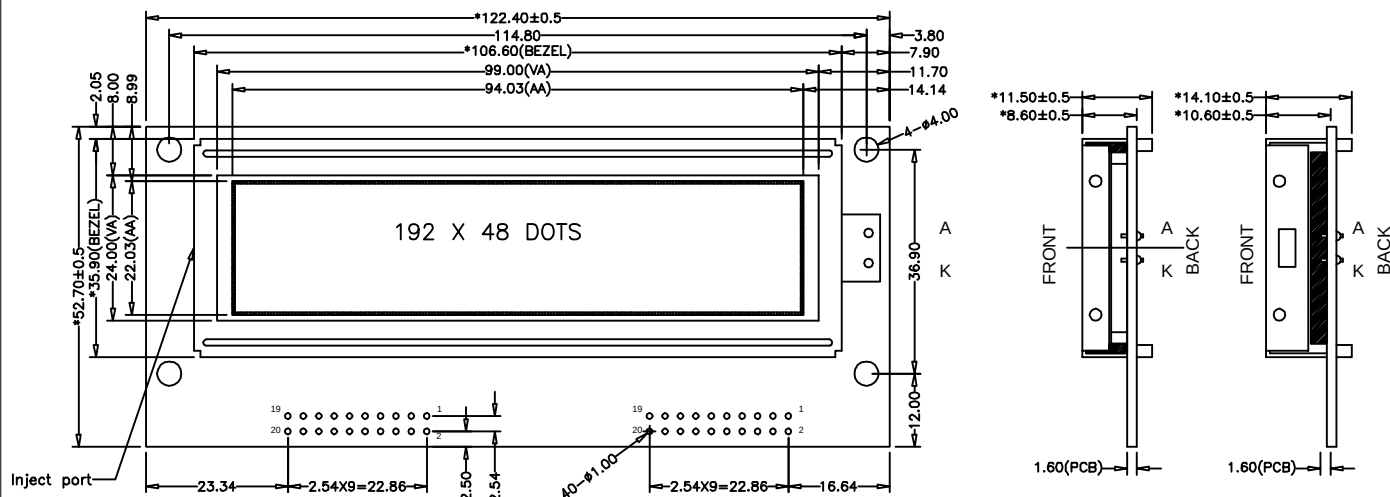


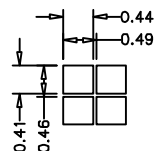
PG-190401 Series

OUTLINE DIMENSION



WITH LED B/L

MECHANICAL DIMENSION	
Overall Dimension (mm)	122.4 X 52.7 X 11.5/14.1
Viewing Area (mm)	99.0 X 24.0
Format	192 SEG × 48 COM
Dot Size (mm)	0.44 X 0.41
Dot Pitch (mm)	0.49 X 0.46



Dot Size

ABSOLUTE MAXIMUM RATINGS				
Parameter	Symbol	MIN	MAX	Unit
Supply Voltage for Logic	Vdd-Vss	-0.3	+7.0	V
Supply Voltage for LCD	Vlcd		+13.0	V
Input Voltage	Vin	- 0.3	Vdd + 0.3	V

ELECTRICAL CHARACTERISTICS (VDD=5.0V ; Top=25° C)					
Parameter	Symbol	MIN	Typical	MAX	Unit
Power Supply Voltage	Vdd-Vss		5.0		V
LCD Operating Voltage	Vop		9.0		V
LCM Current Consumption	Idd				mA
Backlight Current Consumption	LED (Edge)				mA
	LED (Array)				mA
Driving Method	1/48 Duty 1/8 Bias				

NOTES

IC Controller / Driver:

SBN0064G, SBN6400G

LCD Options:

Y/G STN, FSTN, Blue STN

Backlight Options:

Y/G LED, White LED

Viewing Angle Options:

6:00, 12:00

Operating Temperature Options: -0° C ~ +50° C / -20° C ~ +70° C

Storage Temperature Options: -20° C ~ +70° C / -30° C ~ +80° C

PIN ASSIGNMENT		
Pin No.	Symbol	Function
1	VSS	Power Supply (GND)
2	VDD	Power Supply (+)
3	V0	Contrast Adjust
4	RS	
5	R/W	Data Read / Write
6	E	Enable Signal
7	DB0	Data Bus Line
8	DB1	Data Bus Line
9	DB2	Data Bus Line
10	DB3	Data Bus Line
11	DB4	Data Bus Line
12	DB5	Data Bus Line
13	DB6	Data Bus Line
14	DB7	Data Bus Line
15	LED A	Power Supply for LED B/L (-)
16	LED K	Power Supply for LED B/L (+)
17	LED1	
18	LED2	
19	R/W	Data Read / Write
20	E	Enable Signal