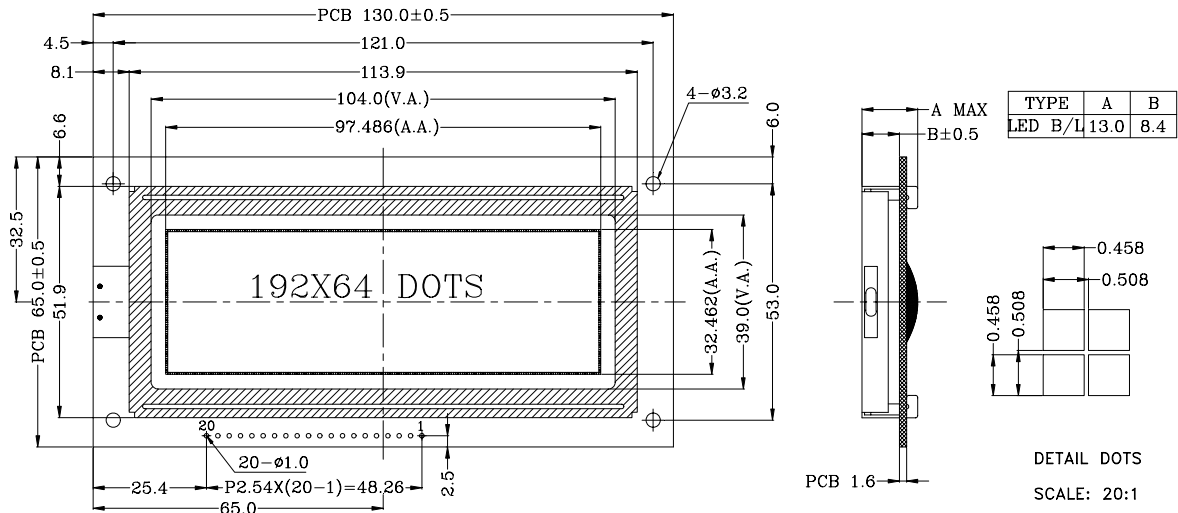


## Outline Dimension



## Graphic Type

### Feature :

- 1、192x64 dot-matrix
- 2、STN/Transflective/Positive/Y-G
- 3、LED:Yellow green /Side light
- 4、Operating Temp.: -20°C ~ +70°C
- 5、1/64 duty cycle, 1/9 Bias
- 6、Built-in Controller (SBN0064G or equivalent)
- 7、Viewing angle: 6 o'clock

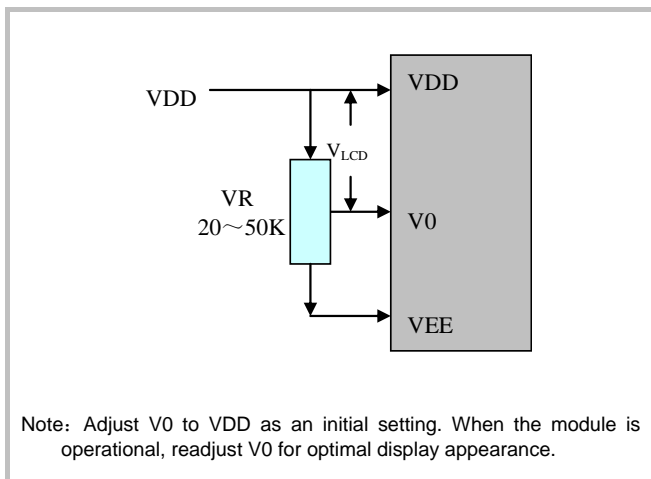
### Electrical Characteristic : (V<sub>SS</sub>=0V, T<sub>a</sub> = 25°C)

Parameter	Symbol	Condition	M <sub>IN</sub>	T <sub>YP</sub>	M <sub>AX</sub>	Unit
Supply voltage for logic	V <sub>DD</sub>	--	4.8	5.0	5.2	V
Supply current for logic	I <sub>DD</sub>	--	--	4	--	mA
Operating voltage for LCD	V <sub>LCD</sub>	-20°C	--	--	--	V
		+25°C	--	9.0	--	V
		+70°C	--	--	--	V
Supply voltage for Backlight	V <sub>BL</sub>	--	--	5.0	--	V
Supply current for Backlight	I <sub>BL</sub>	--	--	300	--	mA

### Absolute Maximum Rating :

Item	Symbol	Standard value			Unit
		M <sub>IN</sub>	T <sub>YP</sub>	M <sub>AX</sub>	
Power supply for logic	V <sub>DD</sub> -V <sub>SS</sub>	-0.3	--	7.0	V
Input voltage	V <sub>I</sub>	-0.3	--	V <sub>DD</sub> +0.3	V

### Adjusting Display Contrast :



### Interface Pin Connections :

Pin No.	Symbol	Level	Description
1	VSS	0V	Ground output for pad option.
2	VDD	+5.0V	Supply voltage for logic operating.
3	V0	--	LCD driver supplies adjusting voltages.
4	D/I	H/L	Command/Data selection from the host microcontroller. When D/I=0, written to an internal register, or status from the internal status register. When D/I=1, written to or read from the display data memory.
5	R/W	H/L	Read/Write(R/W) control signal from the host microcontroller. This pin should be connected to the R/W output of the host microcontroller. A HIGH level on this pin indicates that the microcontroller intends to do a READ operation. A LOW level on this pin indicates that the microcontroller intends to do a WRITE operation.
6	E	H/L	Enable signal (E) from the host microcontroller.
7-14	DB0-DB7	H/L	Bi-direction, tri-state 8-bit parallel data bus for interface with a host microcontroller. This data bus is for data transfer between the host microcontroller and the SBN0064G.
15	/CS1	H/L	When /CS1 = "0" & /CS2 = "1" & /CS3 = "1", the left panel of LCM is active.
16	RET	H/L	When /RES is set to "L", the settings are initialized.
17	/CS2	H/L	When /CS1 = "1" & /CS2 = "0" & /CS3 = "1", the middle panel of LCM is active. When /CS1 = "1" & /CS2 = "1" & /CS3 = "0", the right panel of LCM is active.
18	/CS3	H/L	
19	VEE	--	DC/DC voltage converter output.
20	LED+	+5.0V	Power supply for backlight.