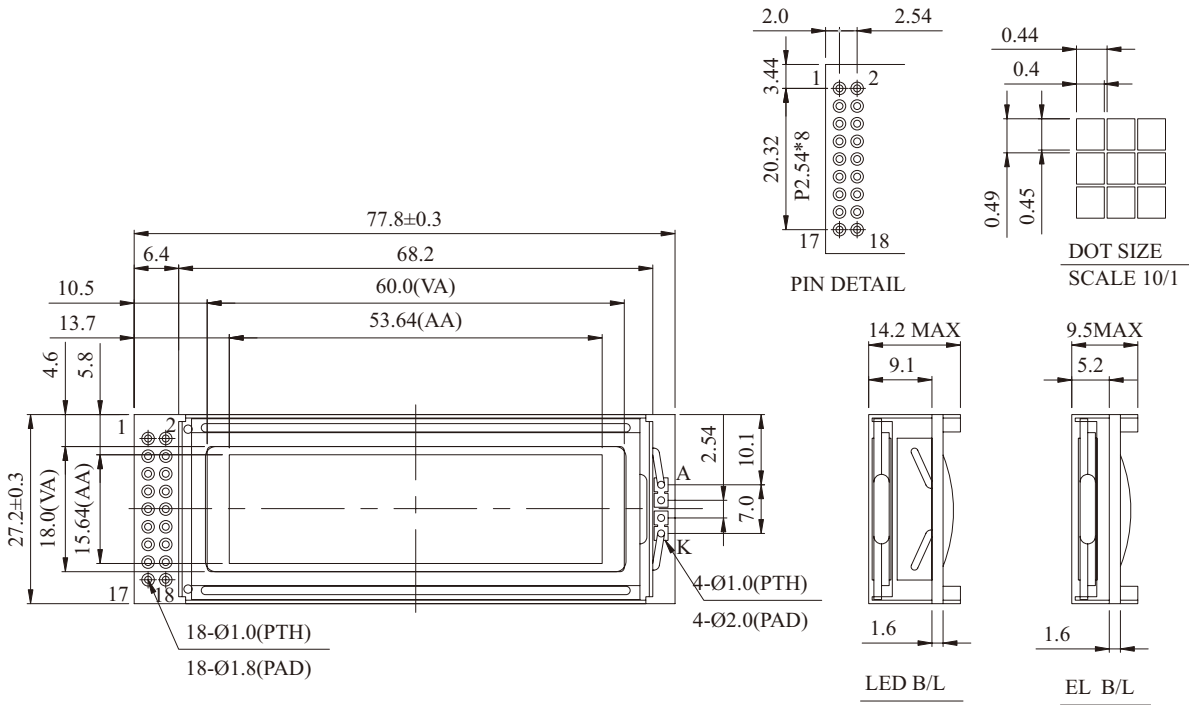


# IG122320 Graphic 122x32 dots

## Dimension drawing



### Feature

1. Built-in controller Avant(SBN1661G) or equivalent
2. 1/32 duty cycle
3. N.V. optional for +3.0V power supply
4. LED backlight only White version

### Mechanical Data

Item	Standard Value	Unit
Module Dimension	77.8x27.2	mm
Viewing Area	60.0x18.0	mm
Mounting hole	0.4x0.45	mm
Character Size	0.44x0.49	mm

Graphic type

Pin NO.	Symbol	Function
1	Vss	Ground
2	Vdd	Supply voltage for logic
3	Vo	Operating voltage for LCD
4	A0	H: Data , L :Instruction
5	CS1	Chip select signal for IC1
6	CS2	Chip select signal for IC2
7	NC/CL	No connection/External clock 2KHz
8	NC/E	No connection/Enable signal
9	R/W	H: read data L:write data
10	DB0	Data bus line
11	DB1	Data bus line
12	DB2	Data bus line
13	DB3	Data bus line
14	DB4	Data bus line
15	DB5	Data bus line
16	DB6	Data bus line
17	DB7	Data bus line
18	/RST	H -> L: The LCM be reset

### Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	4.75	5.0	5.25	V
Input Voltage	VI	0	---	VDD	V

Note: VSS=0 Volt , VDD=5.0 Volt .

### Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	---	4.5	5.0	5.5	V
Supply Current	IDD	---	---	1.0	---	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-VO	-20°C	---	---	5.8	V
		25°C	---	4.9	---	
		70°C	4.6	---	---	
CCFL Starting Voltage	VFLS	25°C	---	---	---	Vrms
CCFL Driving Voltage	VFLD	25°C	---	---	---	Vrms
CCFL Driving Current	IFLD	VFQ=450Vrms 30KHz	---	---	---	mArms
LED Forward Voltage	VF	25°C	3.4	3.5	3.6	V
LED Forward Current	IF	2°C	32	40	60	mA
EL Power Supply Current	IEF	Vel=110VAC,400Hz	---	---	5.0	mA