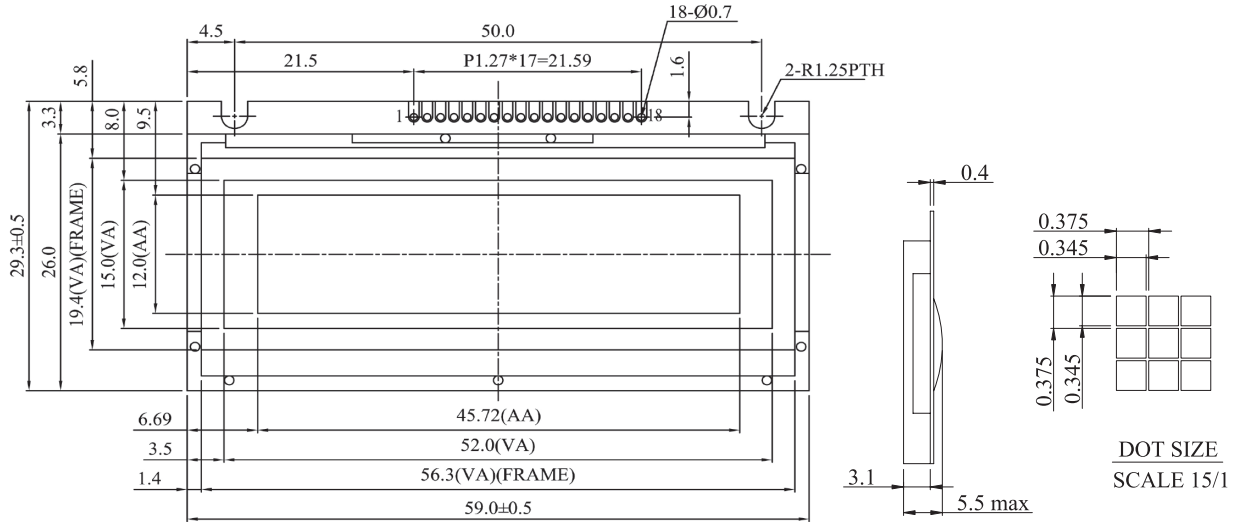




Dimension drawing



Graphic type

Feature

1. Built-in controller Avant(SBN1661G) or equivalent
2. 1/32 duty cycle
3. Chinese Version:WG12232N
4. Pin pitch 2.0mm version: WG12232D1
5. White LED backlight not available

Pin NO.	Symbol	Function
1	VLED	Power supply for LED B/L "-"
2	Vss	GND
3	Vdd	+5V
4	Vo	Contrast Adjustment
5	AO	H:Data L:Instruction
6	E1	Chip Enable for U1(Segment 1~61)
7	E2	Chip Enable for U1(Segment 62~122)
8	DB0	Data bus line
9	DB1	Data bus line
10	DB2	Data bus line
11	DB3	Data bus line
12	DB4	Data bus line
13	DB5	Data bus line
14	DB6	Data bus line
15	DB7	Data bus line
16	RW	H:read data L:write data
17	Vee	Negative Voltage output
18	NC	No Connection

Mechanical Data

Item	Standard Value	Unit
Module Dimension	59.0x 29.3	mm
Viewing Area	52.0x 15.0	mm
Mounting hole	50.0	mm
Dot Pitch	0.375x 0.375	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	2.75	5	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	VDD=+5V	4.5	5.0	5.5	V
Supply Current	IDD	VDD=5V	---	1.0	1.4	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	-20°C	5.3	5.5	5.7	V
		0°C	5.1	5.3	5.5	
		25°C	4.7	4.9	5.1	
		50°C	4.3	4.6	4.9	
		70°C	4.1	4.4	4.7	
LED Forward Voltage	VF	25°C	---	4.2	4.6	V
LED Forward Current	IF	25°C	---	40	---	mA
EL Power Supply Current	IEL	Vel=110VAC,400Hz	---	---	---	mA