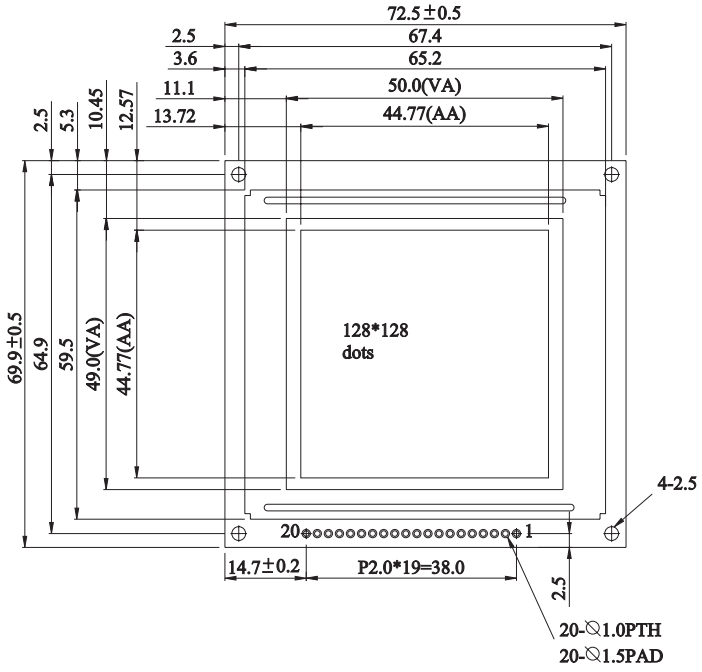
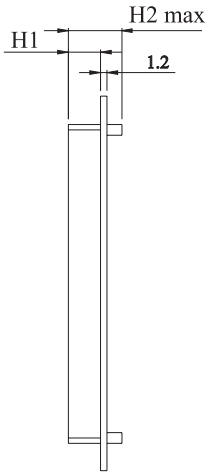
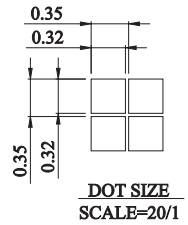
Dimension drawing







Module Height

	Array	Edge
	Y/G	White
H1	9.7	6.0
H2	14.0	10.0

Feature

1. Built-in controller SANYO(LC7981)
2. 1/128 duty cycle
3. +5V power supply

Pin NO.	Symbol	Function
1	DB0	Data bus line
2	DB1	Data bus line
3	DB2	Data bus line
4	DB3	Data bus line
5	DB4	Data bus line
6	DB5	Data bus line
7	DB6	Data bus line
8	DB7	Data bus line
9	RS	Date / Instruction seiect
10	R/$\overline{W}$	Date read / write
11	E	Enable singnal
12	$\overline{CS}$	Chip select
13	$\overline{RES}$	Reset signal
14	VO	Contrast Ad ustment
15	VDD	Power supply (+5V)
16	VSS	Power supply (GND)
17	Vee	Negative voltage output
18	dispoff	NO connection
19	LED(+)	Power supply for LED B/L(+4.2V)
20	LED(-)	Power supply for LED B/L(0V)

Mechanical Data

Item	Standard Value	Unit
Module Dimension	72.5x69.9	mm
Viewing Area	50.0x49.0	mm
Dot Size	0.32x0.32	mm
Dot Pitch	0.35x0.35	mm

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	-0.3	---	VDD	V

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

Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	L level	$0.7V_{DD}$	---	V_{DD}	V
	VIO	H level	---	---	$0.3V_{DD}$	V
Supply Current	IDD	VDD=5V	---	1.5	---	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	-20°C	---	18.0	---	V
		0°C	---	17.5	---	
		25°C	---	17.0	---	
		50°C		16.0		
		70°C	---	15.5	---	
LED Forward Voltage	VF	25°C	---	4.2	4.6	V
LED Forward Current	IF	25°C	---	---	---	mA
EL Power Supply Current	IEL	Vel=110VAC;400Hz	---	---	5.0	mA