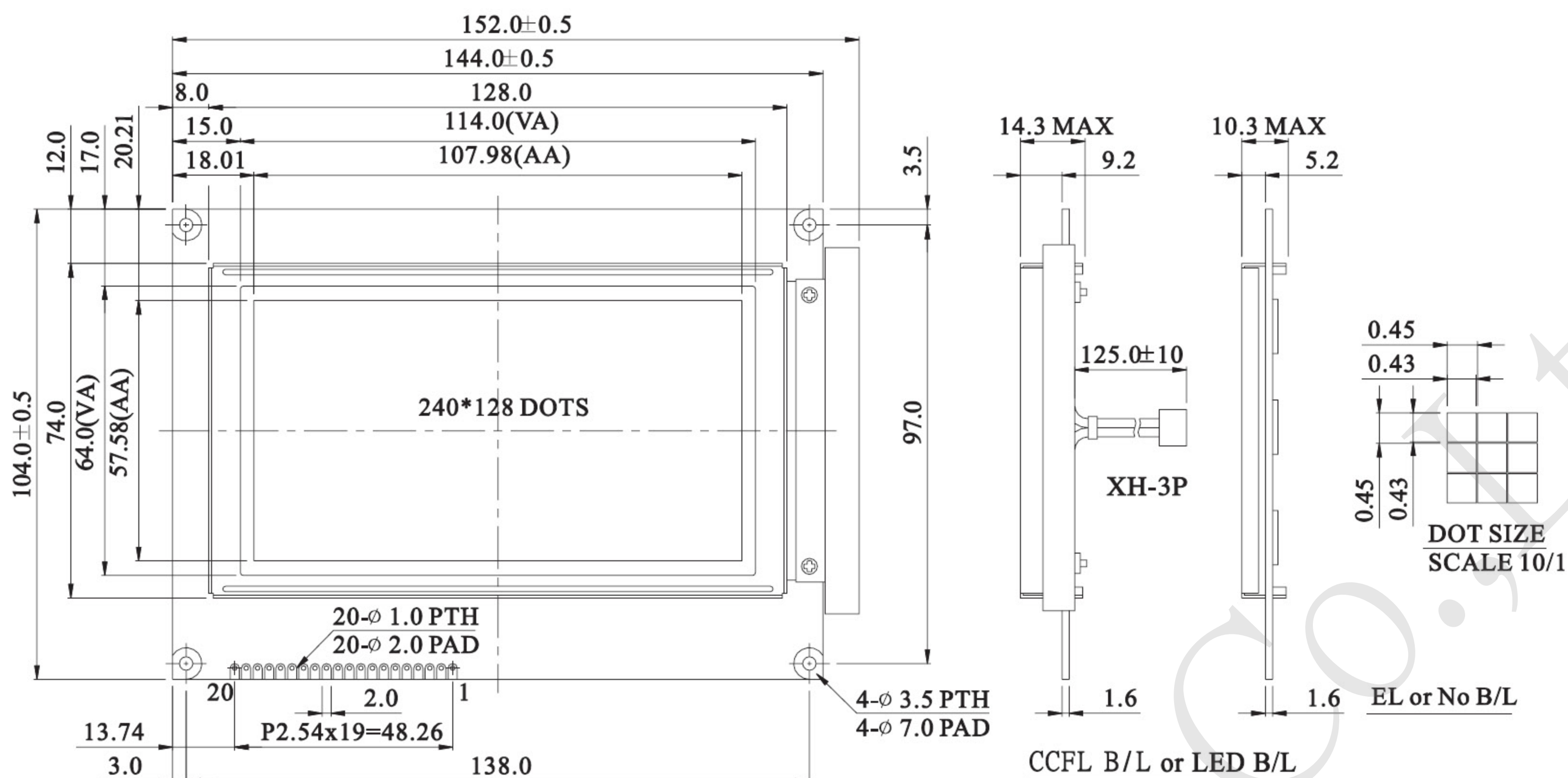


Dimension drawing



Feature

1. Built-in controller(T6963C)
2. 1/128duty cycle
3. Built-in N/V
4. Temperature compensation,optional

Mechanical Data

Item	Standard Value	Unit
Module Dimension	144.0x104.0	mm
Viewing Area	114.0x64.0	mm
Dot Size	0.4x0.4	mm
Dot Pitch	0.45x0.45	mm
Mounting hole	138.0x99.0	mm

Pin NO	Symbol	Function
1	Vss	Power supply (GND)
2	Vdd	Power supply (+5V)
3	Vo	Power supply for LCD driving
4	C/D	Command/data read/write
5	\overline{RD}	Data read
6	\overline{WR}	Data write
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	\overline{CE}	Chip enable
16	\overline{RESET}	Reset signal
17	Vee	Negative Voltage
18	MD2	Control signal
19	FS1	Font selection
20	NC	No connection

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	0	55	60	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	0°C	20.3	21.4	22.5	V
		25°C	18.0	19.1	20.2	
		50°C	17.8	18.9	20.0	
LED Forward Voltage	VF	25°C	---	4.2	---	V
LED Forward Current	IF	25°C	---	900	1800	mA
	CCFL	VF	25°C	---	250	590
IF		25°C	---	---	5.5	mA
EL	---	---	---	---	5.0	mA