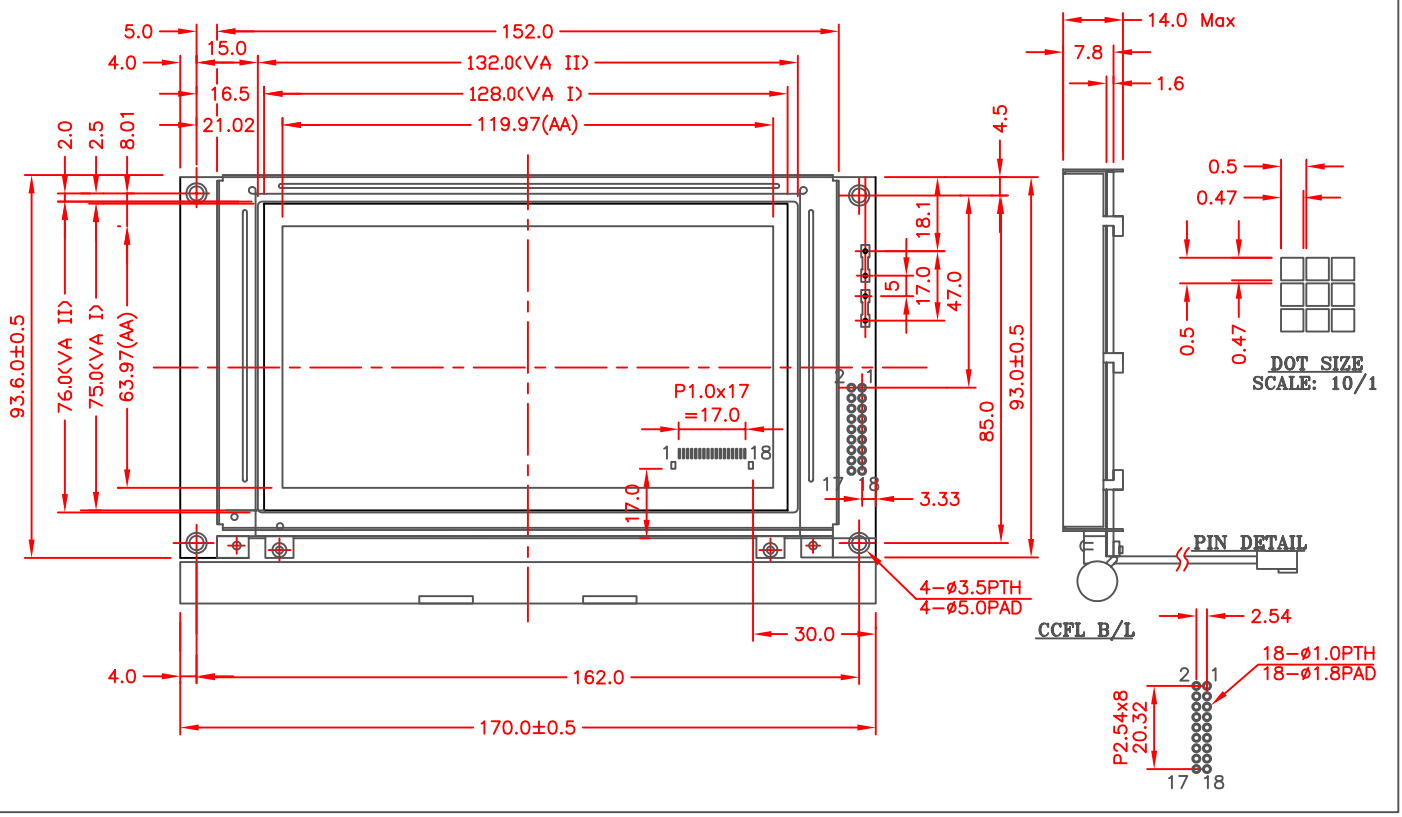

Feature

1. +5V power supply
2. 1/128 duty cycle
3. Built-in N.V.
4. No controller

Pin Assignment

Pin	Symbol	Function
1	FGND	Frame Ground
2	DB0	Data bus line
3	DB1	Data bus line
4	DB2	Data bus line
5	DB3	Data bus line
6	$\overline{\text{DISPOFF}}$	Display off when low level
7	FLM	Operating voltage for LCD
8	M	Control signal for AC driving
9	LP	Display data slatch
10	CP	Display data shift
11	Vdd	Power supply for (+5V)
12	Vss	Power supply for (GND)
13	Vee	Negative voltage output
14	Vo	Contrast Adjustment
15	RV	H/L Data bus line
16	NC	No connection
17	A	Power supply for B/L
18	K	Power supply for B/L

Mechanical Data

Item	Standard Value	Unit
Module Dimension	170.0 x 93.6	mm
Viewing Area	128.0 x 75.0	mm
Dot Size	0.43 x 0.43	mm
Dot Pitch	0.45 x 0.45	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	--	$0.3V_{DD}$	V
Supply Current	IDD	VDD=+5V	--	55	60	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-VO	-20°C	--	--	--	V
		0°C	20.3	21.4	21.8	
		25°C	12.1	19.1	22.1	
		50°C	17.7	18.9	20.1	
		70°C	9.1	11.6	12.8	
LED Forward Voltage	VF	25°C	--	4.2	4.6	V
LED Foward Current	IF	25°C	--	900	1800	mA
CCFL	VF	25°C	--	250	590	Vm
	IF	25°C	--	--	5.5	mA
EL	IEL	Vel=110VAC;400Hz	--	--	5.0	mA

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