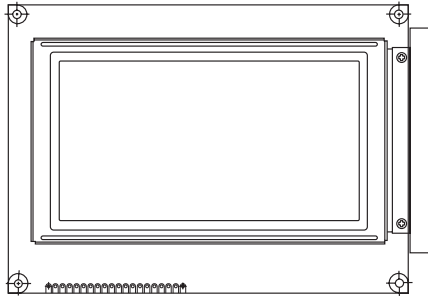


## 240 x 128 Dots Graphic LCD



### FEATURES

- Built-in controller (T6963C)
- 1/240 duty cycle
- Built-in N/V
- Temperature compensation, option

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	144.0 x 104.0	mm
Viewing Area	114.0 x 64.0	mm
Dot Size	0.4 x 0.4	mm
Dot Pitch	0.45 x 0.45	mm

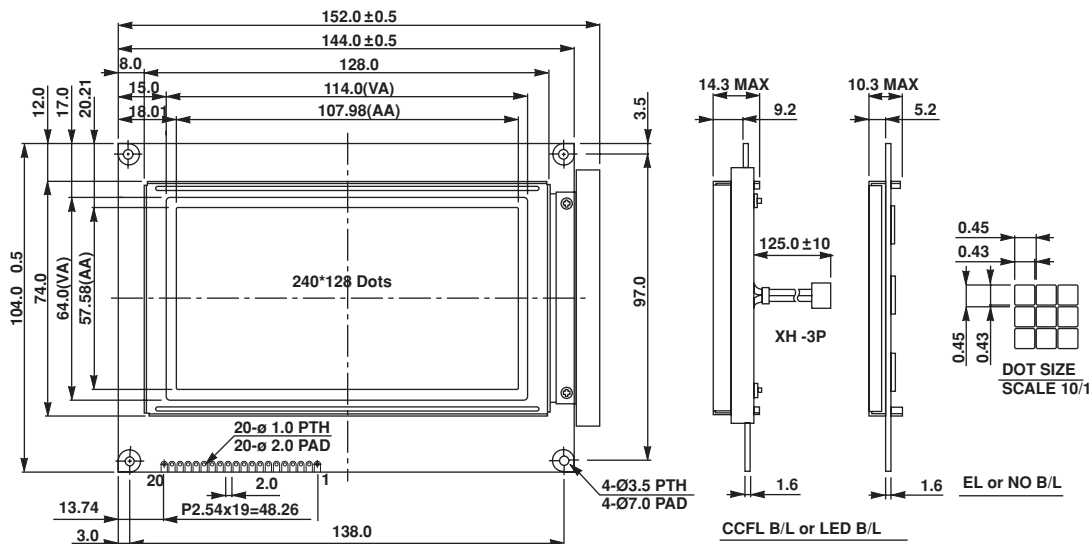
ABSOLUTE MAXIMUM RATING					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	VDD-VSS	4.75	5.0	5.25	V
Input Voltage	VI	- 0.3	-	VDD	V

**NOTE:** VSS = 0 Volt, VDD = 5.0 Volt

ELECTRICAL SPECIFICATIONS						
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	Vms
	IF	25°C	-	-	5.5	mA
EL	IEL	Vel = 110VAC; 400Hz	-	-	5.0	mA

PIN NUMBER	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

## DIMENSIONS in millimeters





## Disclaimer

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