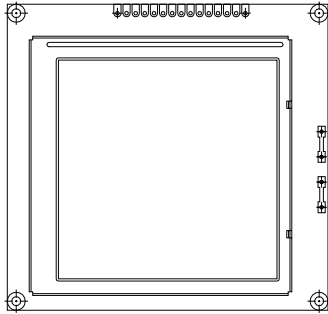


## 160 x 160 Dots Graphic LCD



### FEATURES

- No Built-in controller
- + 5V power supply
- 1/160 duty cycle
- 4-Bit parallel or 1-Bit serial interface mode

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	89.2 x 85.0	mm
Viewing Area	62.0 x 62.0	mm
Dot Size	0.34 x 0.34	mm
Dot Pitch	0.38 x 0.38	mm

ABSOLUTE MAXIMUM RATING					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	VDD-VSS	4.75	5.0	5.52	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	-	1.5	3.0	mA
Recommended LC Driving Voltage for Normal Temp. Version Module	VDD-V0	- 20°C	16.5	18.0	19.5	V
		25°C	15.5	17.0	18.5	
		60°C	14.5	16.0	17.5	
LED Forward Voltage	VF	25°C	-	4.2	4.6	V
LED Forward Current	IF	25°C	-	500	1000	mm
EL	IEL	Vel = 110VAC; 400Hz	-	-	5.0	mA

PIN NUMBER	SYMBOL	FUNCTION
1	Vss (GND)	Ground
2	M	Control signal for A.C.driving
3	FLM	The FLM Signal Indicates the Beginning of each Display Cycle
4	CL1	The CL1 Latches the Serial Data in Shift Register
5	CL2	Clock Signal for Shifting the Serial Data
6	DB3	Data Bus Line
7	DB2	Data Bus Line
8	DB1	Data Bus Line
9	DB0	Data Bus Line
10	Vee	Power Supply for LCD Driving
11	Vdd	Power Supply (+ 5V)
12	Vo	Contrast Adjustment
13	DISPOFF	Controls Display off, 0: off, 1: on
14	A	Power Supply for B/L
15	K	Power Supply for B/L

**DIMENSIONS** in millimeters

