

字符点阵液晶显示模块使用手册

MODULE NO.: DYS-2004C-VERDE-AMARILLO

REVISION NO:

Specification

1. SPECIFICATIONS

1.1 Features

Item	Standard Value
Display Type	20characters × 4 lines
LCD Type	STN (Y/G),POSITIVE/ TRANSMISSIVE
	STN (Blue)NEGATIVE,TRANSMISSIVE
Driver Condition	LCD Module : 1/16Duty , 1/5Bias
Viewing Direction	6 O or 12 O'clock
Backlight Type	Side Y/G or Side White
Interface	8-bit /4bit MPU interface
Driver IC	Aip31066 or EQUIVALENT

1.2 Mechanical Specifications

Item	Standard Value	Unit
Outline Dimension	146(L) * 62.5(W) * max13.5(T)	mm
Viewing Area	123.5(L) * 43(W)	mm
Dot size	0.92(W) × 1.1(H)	mm
Dot pitch	0.06(W) × 0.06(H)	mm
Character size	4.48(W) × 9.22(H)	mm

1.3 Absolute Maximum Ratings

Item	Symbol	Condition	Min.	Max.	Unit
System Power Supply Voltage	VDD	-	-0.3	5.5	V
LCD Driver Supply Voltage	VLCD	-	VDD-12	VDD-0.3	V
Input Voltage	V _{IN}	-	-0.3	VDD + 0.3	V
Operating Temperature	T _{OP}	-	-20	70	°C
Storage Temperature	T _{ST}	-	-30	80	°C
Storage Humidity	H _D	Ta < 40 °C	20	90	%RH

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1.4 DC Electrical Characteristics

VDD = 5.0V $\pm$ 0.2V, GND = 0V, Ta = 25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Logic Supply Voltage	VDD	-	4.5	5.0	5.5	V
Input High Voltage	V _{IH}	-	0.8VDD	-	VDD	V
Input Low Voltage	V _{IL}	-	GND	-	0.3VDD	V
Output High Voltage	V _{OH}	-	0.7VDD	-	VDD	V
Output Low Voltage	V _{OL}	-	GND	-	0.2VDD	V

1.5 Backlight Characteristics

Electrical / Optical Characteristics

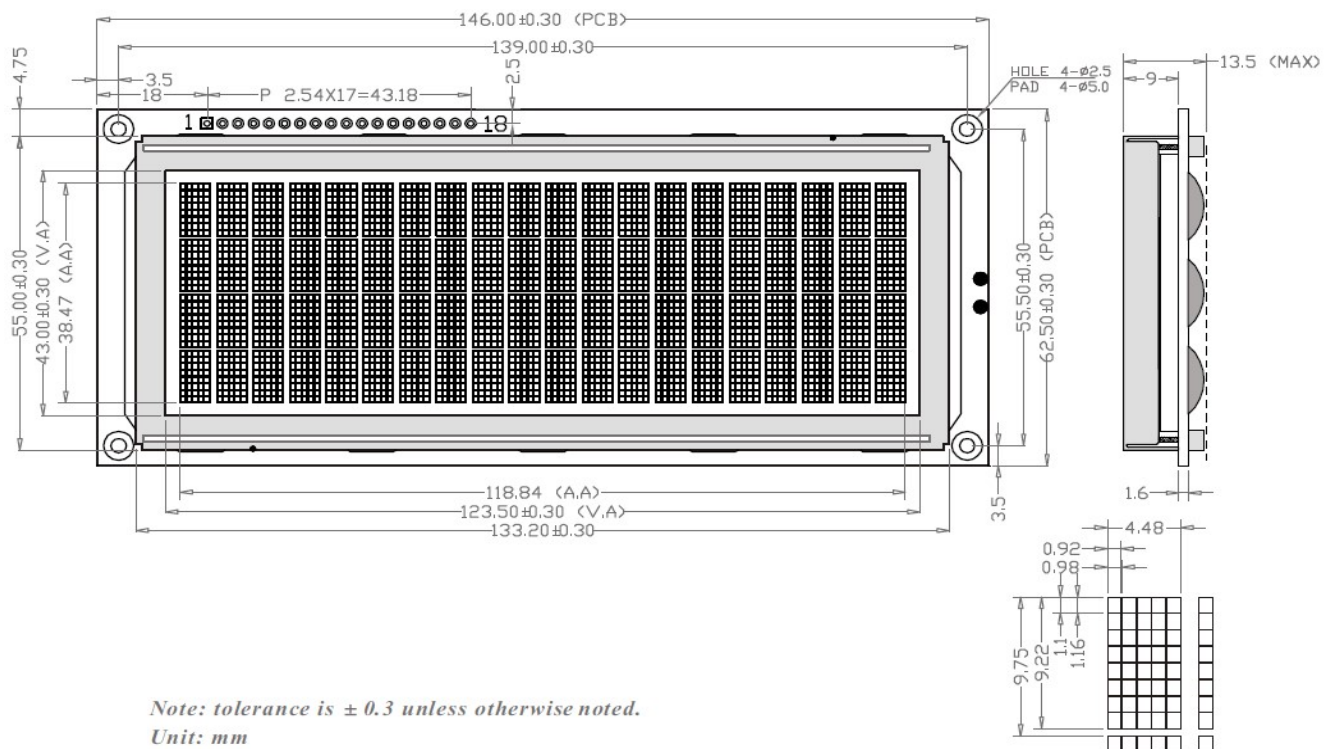
Item	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Forward Voltage	V _f	2.8	3.0	3.2	V	If= 80 mA
Peak Wavelength	λ Peak					
Colour Coordinate	x					
	y					
Luminance	L _v				cd/m ²	
Uniformity	Avg	75	—	—	%	
Reverse Current (Per LED)	I _r			10uA/LED	μA	V _r = 3.0 V

2. MODULE STRUCTURE

2.1 Counter Drawing

2.1.1 LCM Mechanical Diagram

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2.2 Interface Pin Description

No.	Symbol	Function
1	VSS	Ground (0V)
2	VDD	Supply Voltage for Logic (+5.0V)
3	VO	Contrast Adjustment
4	RS	Data/Instruction Select
5	R/W	Read/Write Select
6	E	Enable Signal
7	DB0	Data Bus
8	DB1	Data Bus
9	DB2	Data Bus
10	DB3	Data Bus
11	DB4	Data Bus
12	DB5	Data Bus
13	DB6	Data Bus
14	DB7	Data Bus
15	+(LED_K)	LED Power Supply - (0V)
16	-(LED_A)	LED Power Supply + (3.0V)

APLICACIONES

- TABLEROS INDICADORES
- INDICADORES PARA ASCENSORES
- INDICADORES DE NÚMEROS DE HABITACIÓN
- TORNQUETES
- TABLEROS PARA ALARMA

