

H1326401A-LCM-V01 LCD



132×64 LCD screen mold opening technical requirements

Our company customized a 132×64 monochrome graphic dot matrix LCD screen for vehicle use. The screen is required to work stably in the vehicle working environment. This technical requirement makes the following requirements for the structural dimensions, display area, fixing method, output interface definition, electrical performance parameters and electromagnetic compatibility. At the same time, the vibration resistance of the LCD screen in the vehicle vibration environment should be fully considered during the design.

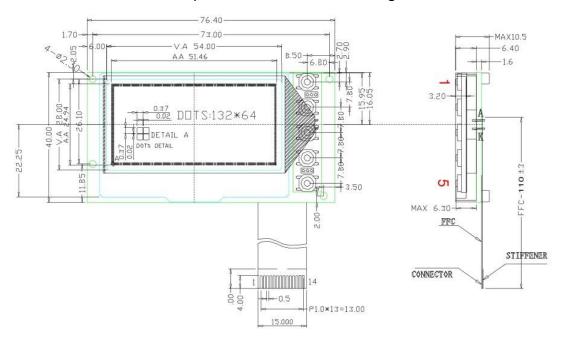
Structural dimensions

Appearance dimensions	76.4(W)mm×40(H)mm×10.5(T)mm
Display area	54(W)mm×28(H)mm
Dot matrix number	132×64

AT0058 @Arvidtek



The structural dimension requirements are shown in the figure below.



Pin Describsions

		When /CS="L",then the chip select becomes					
1	/CS	active					
		Control registers are re-initialized by their					
2	/RST	default states					
3	A0	H:Data L:Instruction code					
4	SCK	Serial clock					
5	SDA	Serial data input					
6	VDD	Supply voltage for logic circuit (DC +3.3V)					
7	VSS	Power Ground.					
8	K5	KEY5					
9	K4	KEY4					
10	BLA	BACKLIGHT + (DC +3.3V)					
11	К3	KEY3					
12	K2	KEY2					
13	K1	KEY1					
14	NC	NC					

AT0058 @Arvidtek

@Arvidtek



Application Notes

Notes:

AT0058

- **1**. BLA (backlight power supply) is powered by DC 3.3V, and VDD (LCD working power supply) is powered by DC 3.3V;
- 2. All communication and control pins are 3.3V level;
- **3.** All buttons are "low level" when pressed, that is, the common end of the 5 buttons is connected to GND, and the non-common end is directly led out;

Electrical technical parameter requirements

Item	Symbol	Condition	Min	Тур.	Max.	Unit
LCD Module Driving						
Voltage	VDD	Ta=25c	3.1	3.3	3.5	V
Supply Current			_	30	60	mA
Operating						
					+70	
Temperature	Тор		-20 c	-	С	С
Storage						_
					+80	
Temperature	Tst		-40 c	-	С	С

Electromagnetic compatibility requirements

1- Electrostatic requirements Test standards refer to GB/T19951-2005. Electrostatic levels can be divided into four levels: A, B, C, and D. The specific descriptions are as follows:

Level A: During the test, the LCD screen should not have a distorted screen or a black screen. Level

Level B: During the test, the LCD screen is allowed to have a distorted screen or a black screen, but within 5 seconds after the static electricity is released, the screen image should be able to automatically recover.

Level C: During the test, the LCD screen is allowed to have a distorted screen or a black screen. It cannot automatically recover after the static electricity incident, and it needs to be powered off and restarted to resume normal work.

Level D: During the test, the LCD screen is directly killed, the display hardware is physically damaged, and the power-off restart cannot resume normal work.

Product datasheet Page 3



Power-on working mode: The LCD screen is subjected to electrostatic tests under power-on working conditions in room temperature. After the test, it should meet the requirements of level A or level B according to the discharge mode and electrostatic voltage level described in the table below.

Power-off mode: The LCD screen is subjected to electrostatic discharge tests in the power-off state. After the test, it should be powered on again according to the discharge mode and electrostatic voltage level described in the table below, and it should meet the requirements of level A.

	Surface	Discharge		Discharge	Level
Test Mode	material	mode	Level	times	Requirements
Power-down		Contact			
mode	Metal surface	discharge	±8KV	10	Α
	Non-metallic				
	surface	Air discharge	±15KV	10	Α
Power-on working		Contact			
mode	Metal surface	discharge	±6KV	10	B/A
	Non-metallic				
	surface	Air discharge	±10KV	10	B/A

2- Anti-interference of automobile electric ignition Test environment:

A: The distance between discharge electrodes is 1cm~1.5cm;

B: The discharge frequency is 12 times/s~200 times/s;

C: The discharge voltage is 10kV~20kV. When the device under test is placed in a plane with a radius of 20cm centered on the discharge electrode in the working state, and the discharge electrode is 5cm~10cm away from the bottom of the device under test, the frequency is swept at a discharge frequency of 12 times/s~200 times/s, and there should be no abnormal conditions such as flickering screen and garbled characters caused by the LCD screen itself.

AT0058 @Arvidtek