

Hunan Huayuan display technology CO.,LTD

VISLCD-1602HY2503

FSTN DOTS LCD MODULE

SPECIFICATION

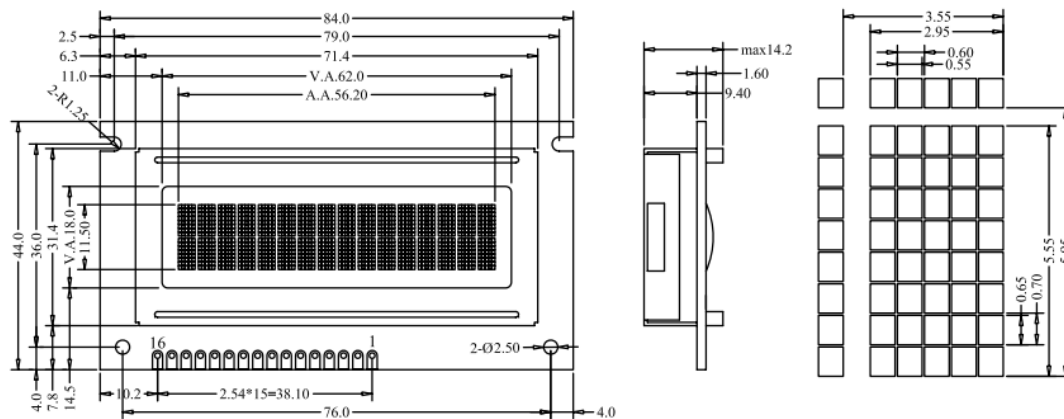
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1. GENERAL SPECIFICATIONS
2. EXTERNAL DIMENSIONS
3. ELECTRICAL CHARACTERISTICS
4. ABSOLUTE MAXIMUM RATINGS
5. OPTICAL CHARACTERISTICS
6. INTERFACE DESCRIPTION
7. BLOCK DIAGRAM
8. APPLICATION EXAMPLES
9. RELIABILITY TEST

1、 GENERAL SPECIFICATIONS

Screen size	2.5"(Diagonal)
Display color	Display color: White Background color: Grey
Type	FSTN
View angle direction	6'clock
Driver mode	1/64 DUTY 1/9 BIAS
Backlight	LED
Controller IC	7066/7065
Data bus	8 bit
Temperature range	Operation: -20 °C ---- +70 °C Storage: -30 °C ---- +80 °C
Number of Dots	16 x 2
Dot size	0.55 x 0.65mm
Dot pitch	0.60 x 0.70mm
Viewing size	62.0 x 18.0mm
Active area	56.2 x 11.5mm
Outline dimension	84.0 x 44.0 x 9.6mm Max.

2、 EXTERNAL DIMENSIONS



3、 ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min	Type	Max	Unit
Supply voltage for logic	$V_{DD}-V_{SS}$	4.75	5.0	5.25	V
Supply Voltage for LCD Driving	$V_{DD}-V_{ADJ}$	Ta=0	-	-	
		Ta=25	-	-7	
		Ta=50	-	-	
Input Voltage	V_{IH}	2.2	-	V_{DD}	
	V_{IL}	0	-	0.6	
LCM Operating Current	I_{DD}	-	1.2	2.5	mA
Supply Current for LED	I_{LED}	-	25	40	
Supply Current for LCD	I_{EE}	-	1.0	-	

4、 ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min	Max	Unit	Remark
Supply voltage for logic	$V_{DD}-V_{SS}$	-0.3	7	V	
Supply Voltage for LCD Driving	$V_{DD}-V_{ADJ}$	-	10		

Operating temperature	T _{OP}	-20	+70	°C	
Storage temperature	T _{ST}	-30	+80		

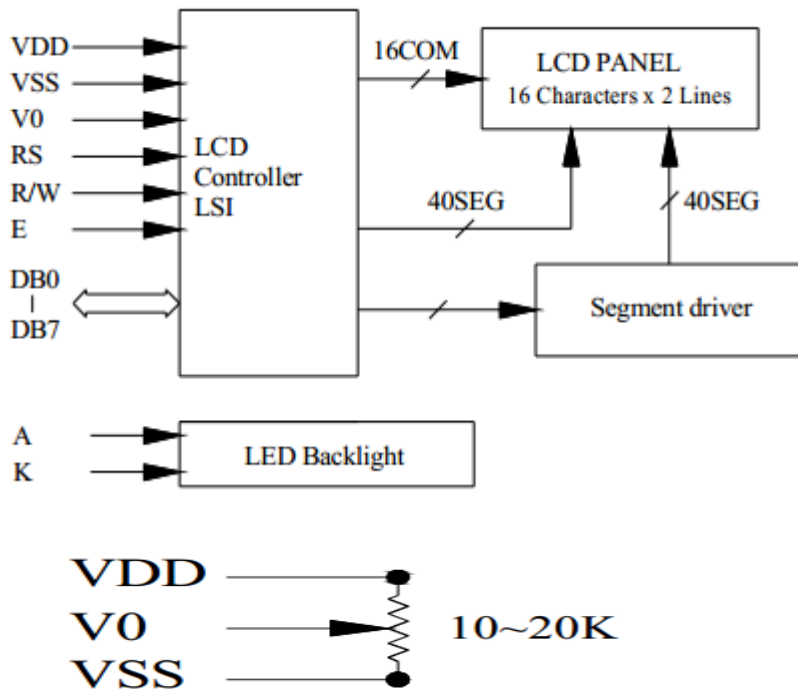
5、 OPTICAL CHARACTERISTICS

Item	Symbol	Condition	Typ.	Unit	Remark
Viewing angle	∅f	C _R ≥2	40	Radian	∅f
	∅b		30		∅b
	∅l		30		∅l
	∅r		30		∅r
Response time	T _R	TA=25 °C	120	ms	
	T _F		130		
Frame Frequency	F _{RM}		64	Hz	
Contrast ratio	C _R		6.0	-	

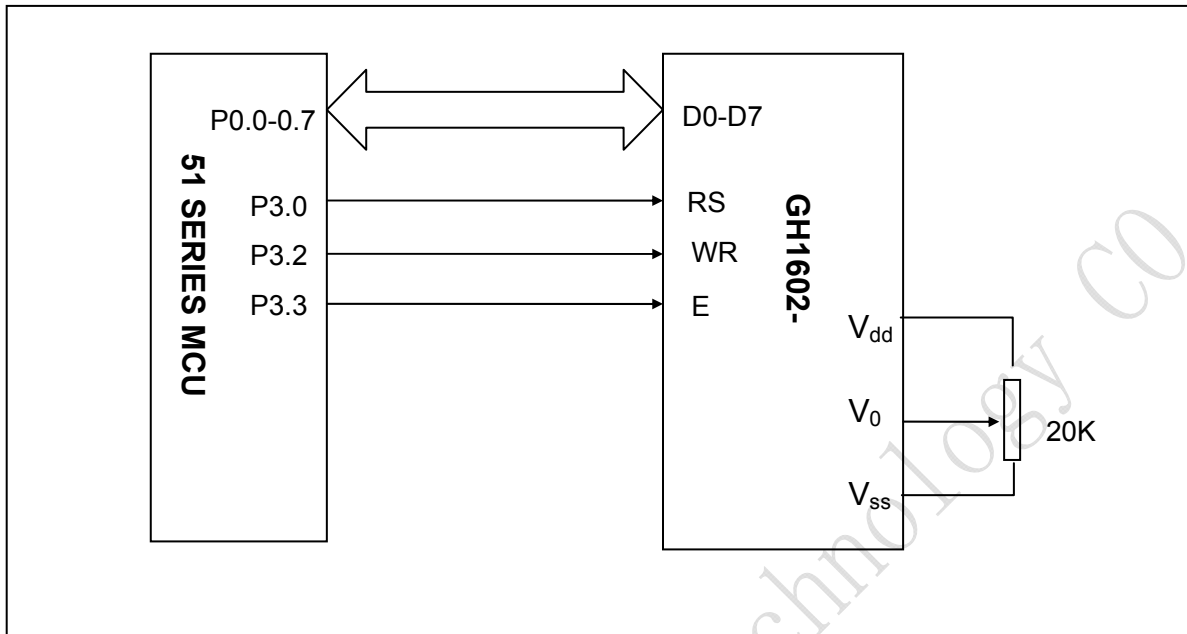
6、 INTERFACE DESCRIPTION

PIN	DESC	Function
1	A	backlight positive
2	K	backlight negative
3	VSS	GND(0V)
4	VDD	Supply Voltage for Logic(+5V)
5	V0	Power supply for LCD
6	RS	H: Data; L: Instruction Code
7	RW	H: Read; L: Write
8	E	Enable Signal
9-16	D0-D7	Data Bus Line

7、 BLOCK DIAGRAM



8、 APPLICATION EXAMPLES



9、 RELIABILITY TEST

NO	Test Project	Test Condition	Remark
1	High temperature	60°C ± 2°C 24H	After testing, the appearance and electrical performance deficiencies should not happen.
2	Low temperature	-20°C ± 2°C 24H	
3	High temperature and humidity test	40°C ± 5°C × 90%RH/24H	
4	Hot and cool shock test	-10°C ± 2 → 25°C → 70°C ± 2 (30min) (5min) (30min) 10 cycles	
5	Vibration test	10Hz-50Hz-10Hz Amplitude 1.5mm	

		X、Y、Z each 3H	
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Remark:

1. Above test number is 2 piece.
2. Do moistureproof test, should use the pure water (10M Ω resistor ").
3. individual products caused by electrostatic discharge failure damage, if the products will be reset after the restore to the normal state as a good use.
When the panel protective film LCM, Tear down the labels slowly (more than a second recommendation).
- 4 Please use the automatic switching menu (or scroll) test mode, test mode of operation.
- 5 Suggestions Use the menu to adjust the contrast model.