

EVERVISION

Wide View TFT

DATASHEET

VGG324802-0TSLWA



Application

This specification is applied to the 3.5 inch HVGA supported TFT-LCD module and can display 262K colors.

Features

- HVGA (320×480 pixels) resolution.
- RGB+3 SPI(default)

General Specifications

Item	Specifications	Unit
Screen Size	3.5 (Diagonal)	inch
Display Format	320RGB(H)×480(V)	dot
Active Area	48.96(H)×73.44(V)	mm
Pixel Pitch	0.153(H)×0.153(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	IPS Type/Transmissive Mode/Normally Black	-
Surface Treatment	Clear	-
Viewing Direction	Full view angle	-
Outline Dimension	54.48(W)×84.71(H)×2.2(D)	mm

Absolute Maximum Ratings

Absolute Ratings of Environment

Item	Symbol	Value		Unit
		Min.	Max.	
Storage Temperature	T _{ST}	-30	+80	°C
Operating Temperature	T _{OP}	-30	+70	°C

Electrical Absolute Ratings

TFT-LCD Module

(Ta=25±2°C, GND=VSS=0V)

Item	Symbol	Value		Unit
		Min.	Max.	
Supply Voltage(Analog)	VCC	-0.3	3.3	V
Supply Voltage(I/O)	IOVCC	-0.3	3.3	V

Electrical Characteristics

TFT-LCD Module

(Ta=25±2°C)

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Analog voltage	VCC	2.5	2.8	3.3	V
Logic voltage	IOVCC	1.65	1.8	3.3	V
Level input voltage	VIH	0.7IOVCC	-	IOVCC	V
	VIL	-0.3	-	0.3IOVCC	V
Level output voltage	VOH	0.8IOVCC	-	IOVCC	V
	VOL	0	-	0.2VCC	V
Analog Supply current	ICC	-	(TBD.)	(TBD.)	mA
Logic Supply current	IOCC	-	(TBD.)	(TBD.)	mA

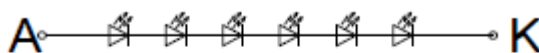
Backlight Unit

(Ta=25±2℃)

Item	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Forward Current	IF	-	20	-	mA	
Forward Voltage	VF	16.8	(19.2)	20.4	V	IF =20mA,(2)
LED Life Time(25℃)	-	-	30000	-	Hrs.	(1)

Note (1) : LED life time is defined as under 25±2℃ , when the average brightness decrease to 50% of original brightness.

Note (2) : The BLU is driven by constant current, the voltage value is for reference only.



LED CIRCUIT DIAGRAM

Input / Output Terminals Pin Assignment

TFT-LCD Module

Pin No.	Symbol	Description
1	GND	System Ground.
2	LED A	Backlight LED Anode.
3	LED A	Backlight LED Anode.
4	LED K	Backlight LED Cathode.
5	LED K	Backlight LED Cathode.
6	GND	System Ground.
7	GND	System Ground.
8	VCI	A supply voltage to the analog circuit.
9	IOVCC	A supply voltage to the digital circuit.
10	/RESET	Reset signal.
11	VS	Vertical sync input. Negative polarity.
12	HS	Horizontal sync input. Negative polarity.
13	GND	System Ground.
14	PCLK	Dot clock signal input.
15	GND	System Ground.
16	DE	Data enable input.
17-22	R5-R0	Data bus.
23-28	G5-G0	Data bus.
29-34	B5-B0	Data bus.
35	SDO	Serial data output
36	SDI	Serial data input pin.
37	RDX	LCD driver read enable
38	WRX/SCL	DBI Type B: WRX PIN, serves as a write signal. DBI Type C: SCL PIN, as serial clock when operates in the interface.
39	RS	Command/display data selection signal.
40	CS	Chip select signal
41	TE	Tearing effect output pin.
42	NC/XR	No connection.
43	NC/YD	No connection.
44	NC/XL	No connection.
45	NC/YU	No connection.

Outline Drawing

