

TFT LCD Approval Specification

MODEL NO.: G150X1 –L02

Customer : _____

Approved by : _____

Note :

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REVISION HISTORY

Version	Date	Page (New)	Section	Description
Ver 2.0	Dec. 15, '06	All	All	Approval Specification was first issued.

1. GENERAL DESCRIPTION

1.1 OVERVIEW

G150X1-L02 is a 15.0" TFT Liquid Crystal Display module with 2 CCFL Backlight units and 20 pins LVDS interface. This module supports 1024 x 768 XGA mode and can display 16.2M colors.

The PSWG is to establish a set of displays with standard mechanical dimensions and select electrical interface requirements for an industry standard 15.0" XGA LCD panel and the inverter module for Backlight is not built in.

1.2 FEATURES

- XGA (1024 x 768 pixels) resolution
- DE (Data Enable) only mode
- LVDS Interface with 1pixel/clock
- PSWG (Panel Standardization Working Group)
- Wide operating temperature.
- RoHS compliance

1.3 APPLICATION

- TFT LCD Monitor
- TFT LCD TV
- Factory Application
- Amusement
- Vehicle

1.4 GENERAL SPECIFICATIONS

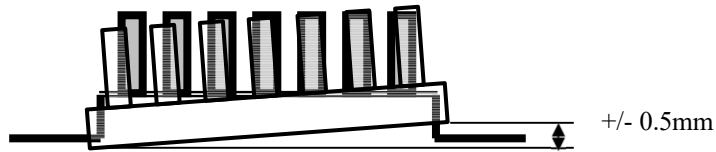
Item	Specification	Unit	Note
Active Area	304.128 (H) x 228.096(V) (15.0" diagonal)	mm	(1)
Bezel Opening Area	307.4(H) x 231.3(V)	mm	
Driver Element	a-Si TFT active matrix	-	-
Pixel Number	1024 x R.G.B x 768	pixel	-
Pixel Pitch	0.297(H) x 0.297(W)	mm	-
Pixel Arrangement	RGB vertical Stripe	-	-
Display Colors	16,194,277	color	-
Display Mode	Normally White	-	-
Surface Treatment	Hard Coating (3H), Anti-Glare (Haze 25)	-	-

1.5 MECHANICAL SPECIFICATIONS

Item	Min.	Typ.	Max.	Unit	Note	
Module Size	Horizontal(H)	326.0	326.5	327.0	mm	(1)
	Vertical(V)	253.0	253.5	254.0	mm	
	Depth(D)	-	-	14.35	mm	(1)(2)
Weight	-	-	1100	g	-	

Note (1) Please refer to the attached drawings for more information of front and back outline dimensions.

Note (2) The depth is without connector.



2. ABSOLUTE MAXIMUM RATINGS

2.1 ABSOLUTE RATINGS OF ENVIRONMENT

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Storage Temperature	T _{ST}	-40	80	°C	(0), (1)
Operating Ambient Temperature	T _{OP}	-30	70	°C	(0), (1), (2)

Test Item	Test Condition	Note
High Temperature Storage Test	80°C, 240 hours	(1), (2)
Low Temperature Storage Test	-40°C, 240 hours	
Thermal Shock Storage Test	-40°C, 0.5hour ← → 80°C, 0.5hour; 100cycles, 1hour/cycle	
High Temperature Operation Test	70°C, 240 hours	
Low Temperature Operation Test	-30°C, 240 hours	
High Temperature & High Humidity Operation Test	60°C, RH 90%, 240hours	
Heat Cycle Operation Test	-30°C, 1hour ← → 70°C, 1hour; 50cycles, 4hour/cycle	
ESD Test (Operation)	150pF, 330 Ω, 1sec/cycle Condition 1 : panel contact, ±8KV Condition 2 : panel non-contact ±15KV	(2)
Shock (Non-Operating)	50G, 11ms, half sine wave, 1 time for ± X, ± Y, ± Z direction	(2), (3)
Vibration (Non-Operating)	1.5G, 10 ~ 500 Hz sine wave, 1.5mm Max, 30min/cycle, 1 cycles each X, Y, Z direction	(2), (3)

Note (0) All test conditions are as above table.

Note (1) Temperature and relative humidity range is shown in the figure below.

(a) 90 %RH Max. (Ta δ 40 °C).

(b) Wet-bulb temperature should be 39 °C Max. (Ta > 40 °C).

(c) No condensation of water.

Note (2) No display malfunctions.

Note (3) At testing Vibration and Shock, the fixture in holding the module has to be hard and rigid enough so that the module would not be twisted or bent by the fixture.

Note (4) Temperature of panel display surface area should be 80 °C Max.

2.2 ELECTRICAL ABSOLUTE RATINGS

2.2.1 TFT LCD MODULE

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Power Supply Voltage	V _{DD}	-0.3	4.0	V	

2.2.2 BACKLIGHT UNIT

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Lamp Voltage	V _L	-	2.5K	V _{RMS}	(1), (2), I _L = 8 mA
Lamp Current	I _L	-	8.5	mA _{RMS}	(1), (2)
Lamp Frequency	F _L	40	80	KHz	

Note (1) Permanent damage to the device may occur if maximum values are exceeded. Function operation should be restricted to the conditions described under Normal Operating Conditions.

Note (2) Specified values are for lamp (Refer to Section 3.2 for further information).

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/385024014040011034>