

TFT-DISPLAY DATASHEET

DATA IMAGE

Model: FG0500E0DSSWBG01

BRIEF SPEC.:

Main Feature

Landscape
Wide Aspect

Active Screen Area	108 x 64.8 (mm)
Diagonal Format	5" 15:9
Resolution	800 X 480
Colors	16.7M
Backlight	White
Brightness	350 cd/m ²
LED Life Time	20 K (h)
Interface	TTL
Viewing Angle	70/70 L/R 50/70
Touchscreen	no
Power Supply	3.3,V (Typ.)
Module Outline	120.7 x 76.3 x 3.0 (mm)
Operation Temperature	-20... +70 °C
Storage Temperature	-30... +80 °C
Surface Treatment	Glare



DATA IMAGE CORPORATION

TFT Module Specification

ITEM NO.: FG0500E0DSSWBG01

Table of Contents

1. COVER & CONTENTS	1
2. RECORD OF REVISION	2
3. GENERAL SPECIFICATIONS	3
4. ABSOLUTE MAXIMUM RATINGS	3
5. ELECTRICAL CHARACTERISTICS	3
6. BLOCK DIAGRAM	4
7. PIN CONNECTIONS	5
8. POWER SEQUENCE.....	8
9. INTERFACE SPECIFICATIONS	9
10. OPTICAL CHARACTERISTIC	12
11. QUALITY ASSURANCE	15
12. LCM PRODUCT LABEL DEFINE	19
13. PRECAUTIONS IN USE LCM	21
14. OUTLINE DRAWING	22
15. PACKAGE INFORMATION.....	23

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Approved by	Version:	Issued Date:	Sheet Code:	Total Pages:
	B	23/JUN/15'		23

2. RECORD OF REVISION

Rev	Date	Item	Page	Comment	Source
A	28/AUG/14'			New Release.	NPPR-0601
B	23/JUN/15'	6 11.1	5 15	Modify BLOCK DIAGRAM Update Test Condition	11S-F60016

3. GENERAL SPECIFICATIONS

Parameter	Specifications	Unit
Display resolution	(800X R.G.B) (W) x480(H)	dot
Active area	108(W) x 64.8(H)	mm
Screen size	5.0(Diagonal)	inch
Display mode	Normally white, transmissive	
Pixel pitch	0.135(W) x 0.135(H)	mm
Color configuration	R.G.B. Stripe	
Surface treatment	Clear	
Overall dimension	120.70 (W) x76.30 (H) x 3.00 (T)	mm
Weight	58	g
View Angle direction(Gray inversion)	6 o'clock	
Our components and processes are compliant to RoHS standard		

4. ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	MIN.	MAX.	Unit	Remark
Power voltage	DV _{DD}	-0.3	5.0	V	
	AVDD	-0.5	13.5	V	
	V _{GH}	-0.3	42.0	V	
	V _{GL}	-20.0	0.3	V	
Operating temperature	Top	-20	+70	°C	
Storage temperature	Tst	-30	+80	°C	

Note 1: The absolute maximum rating values of this product are not allowed to be exceeded at any times. Should a module be used with any of the absolute maximum ratings exceeded, the characteristics of the module may not be recovered, or in an extreme

5. ELECTRICAL CHARACTERISTICS

5.1 Typical operation conditions

Parameter	Symbol	MIN.	Typ.	MAX.	Unit	Remark
Power voltage	DV _{DD}	+3.0	+3.3	+3.6	V	Note 2
	AVDD	10.2	10.4	10.6	V	
	V _{GH}	15.3	16.0	16.7	V	
	V _{GL}	-6.7	-6.0	-5.3	V	
Current for Driver	IDV _{DD}	-	4.2	10	mA	DV _{DD} =3.3V
	I _{AVDD}	-	19	50	mA	AV _{DD} =10.4V
Input signal voltage	V _{COM}	3.09	4.09	5.09	V	Note 4
"H" level logical input voltage	V _{IH}	0.7 DV _{DD}	--	DV _{DD}	V	
"L" level logical input voltage	V _{IL}	0	--	0.3 DV _{DD}	V	

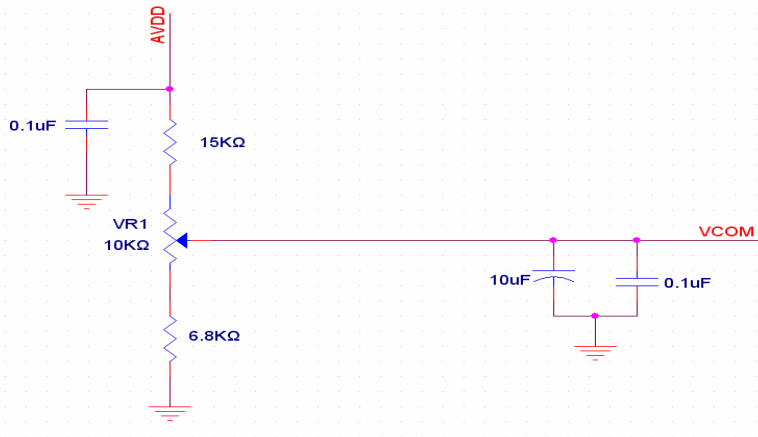
Note 1: Be sure to apply DVDD and VGL to the LCD first, and then apply VGH.

Note 2: DVDD setting should match the signals output voltage (refer to Note 3) of customer's system board.

Note 3: DCLK,HS,VS,RESET,U/D, L/R,DE,R0~R7,G0~G7,B0~B7,MODE,DITHB.

Note 4: Typical VCOM is only a reference value. It must be optimized according to each LCM.

Please use VR and base on below application circuit.



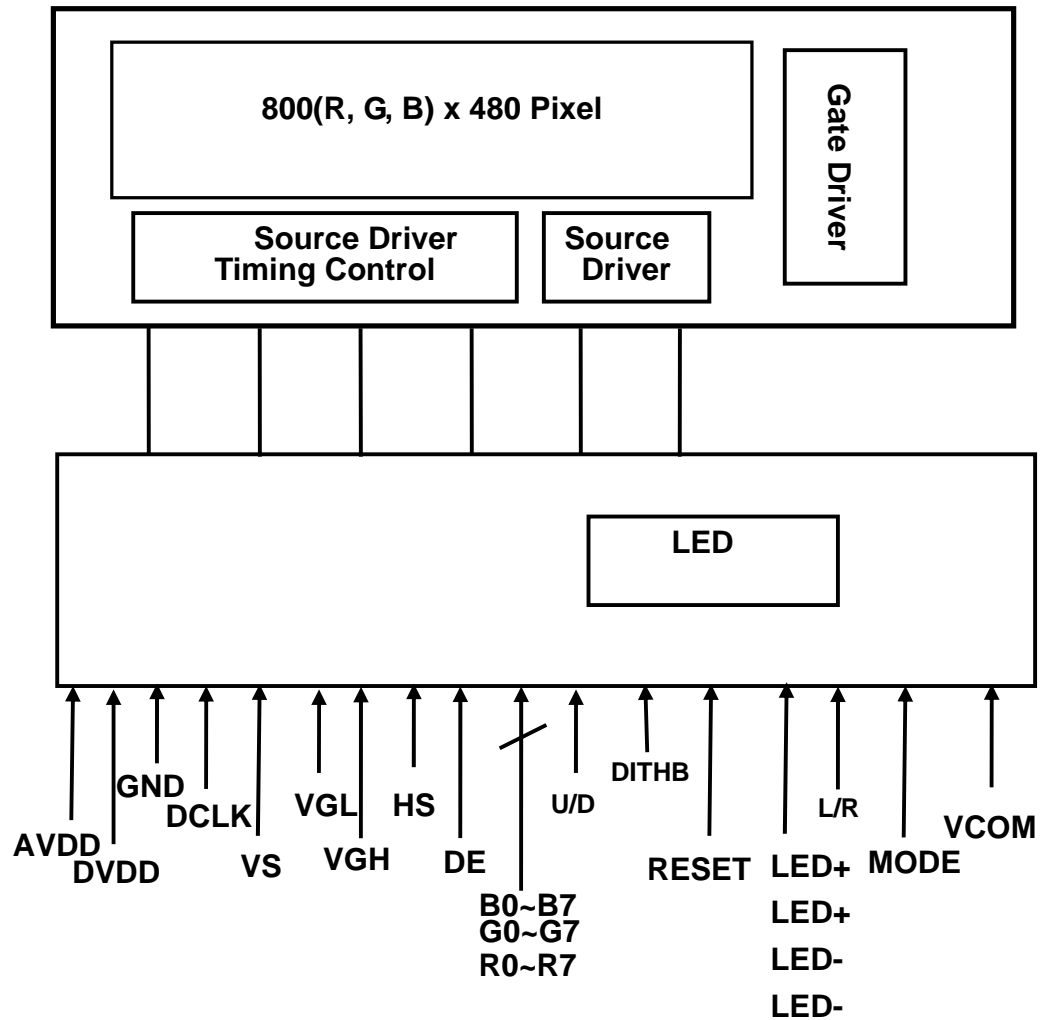
5.2 Backlight Unit

Parameter	Symbol	Min	Typ.	Max.	Unit	Remark
LED voltage	VF	19.6	21.7	23.8	V	
LED current	IL	36	40	44	mA	
Operating LED Life Time		20,000	--	--	Hour	Note(1)

Note 1: The LED Supply Voltage is defined by the number of LED at $T_a=25^{\circ}\text{C}$ and, $I_L=40\text{mA}$.

Note 2: The "LED life time" is defined as the module brightness decrease to 50% original brightness at $T_a=25^{\circ}\text{C}$ and $I_L=40\text{mA}$. The LED lifetime could be decreased if operating I_L is larger than 40 mA

6. BLOCK DIAGRAM



7. PIN CONNECTIONS

Pin No.	Symbol	I/O	Function
1	VLED+	P	Power for LED backlight (Anode)
2	VLED+	P	Power for LED backlight (Anode)
3	VLED-	P	Power for LED backlight (Cathode)
4	VLED-	P	Power for LED backlight (Cathode)
5	GND	P	Power ground
6	VCOM	P	Common voltage
7	DVDD	P	Power for Digital Circuit
8	MODE	I	DE/SYNC mode select
9	DE	I	Data Input Enable
10	VS	I	Vertical Sync Input
11	HS	I	Horizontal Sync Input
12	B7	I	Blue data(MSB)
13	B6	I	Blue data
14	B5	I	Blue data
15	B4	I	Blue data
16	B3	I	Blue data
17	B2	I	Blue data
18	B1	I	Blue data
19	B0	I	Blue data(LSB)
20	G7	I	Green data(MSB)
21	G6	I	Green data
22	G5	I	Green data
23	G4	I	Green data
24	G3	I	Green data
25	G2	I	Green data
26	G1	I	Green data
27	G0	I	Green data(LSB)
28	R7	I	Red data(MSB)
29	R6	I	Red data
30	R5	I	Red data
31	R4	I	Red data
32	R3	I	Red data
33	R2	I	Red data
34	R1	I	Red data
35	R0	I	Red data(LSB)
36	GND	P	Power Ground
37	DCLK	I	Sample clock
38	GND	P	Power Ground
39	L/R	I	Left / right selection
40	U/D	I	Up/down selection
41	VGH	P	Gate ON Voltage
42	VGL	P	Gate OFF Voltage
43	AVDD	P	Power for Analog Circuit

44	RESET	I	Global reset pin.
45	NC	-	No connection
46	VCOM	P	Common Voltage
47	DITHB	I	Dithering function
48	GND	P	Power Ground
49	NC	-	No connection
50	NC	-	No connection

I/O:I: input, O: output, P: Power

Note 1: DE/SYNC mode select. Normally pull high.

When select DE mode, MODE="1", VS and HS must pull high. When select SYNC mode, MODE="0", DE must be grounded.

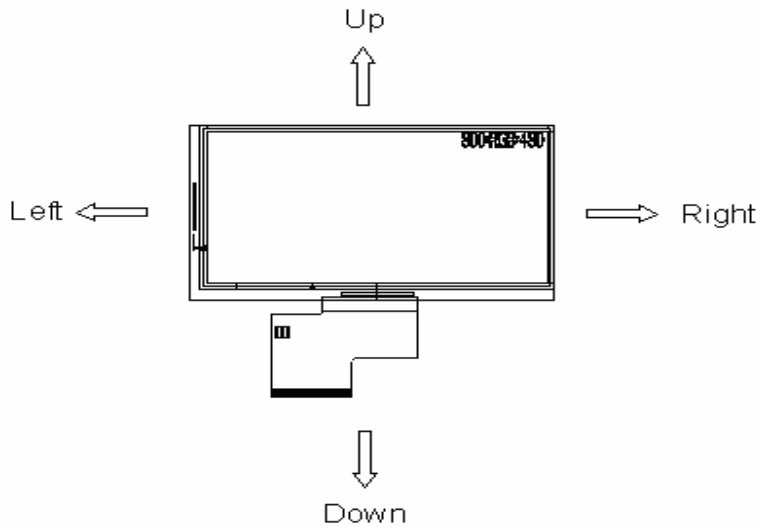
Note 2: Data shall be latched at the falling edge of DCLK.

Note 3: Selection of scanning mode

Setting of scan control input		Scanning direction
U/D	L/R	
GND	DVDD	Up to down, left to right
DVDD	GND	Down to up, right to left
GND	GND	Up to down, right to left
DVDD	DVDD	Down to up, left to right

Note 4: Definition of scanning direction.

Refer to the figure as below



Note 5: Dithering function enable control, normally pull high.

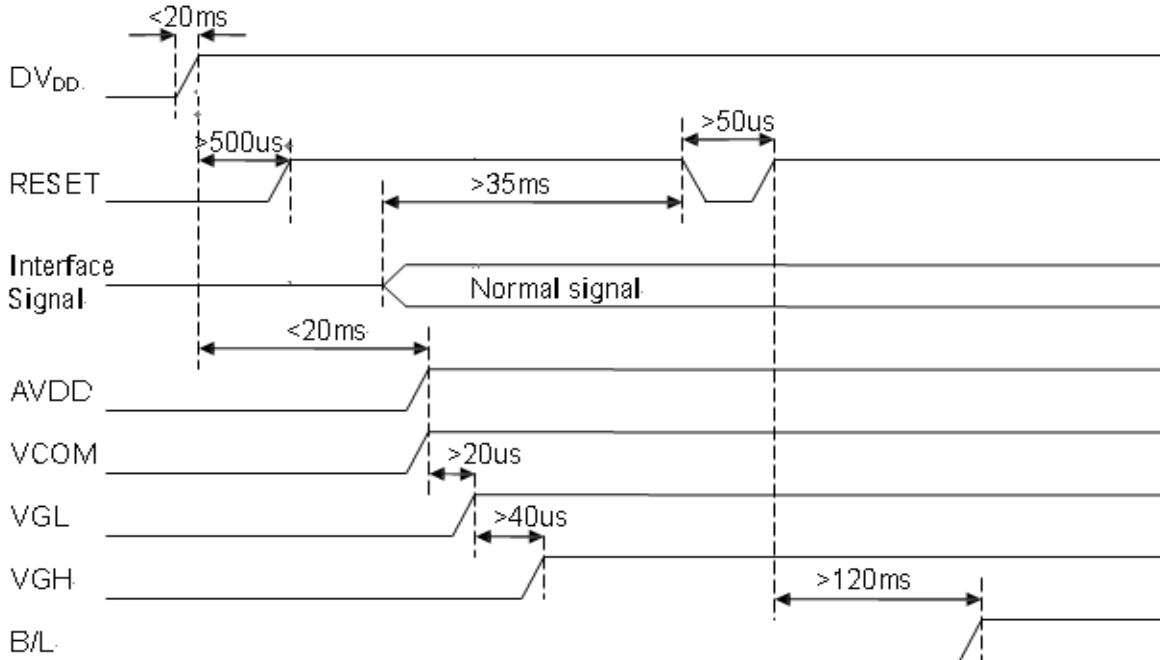
When DITHB="1", Disable internal dithering function,

When DITHB="0", Enable internal dithering function.

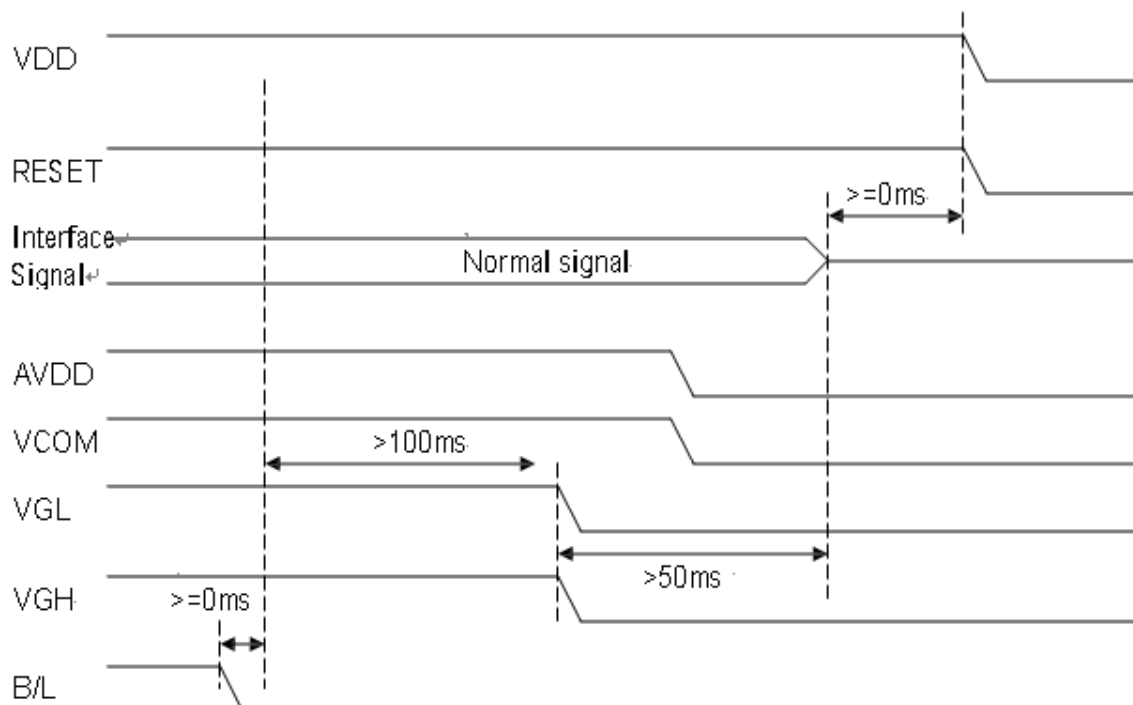
8. Power Sequence

To prevent a latch-up or DC operation of the LCD module, the power on/off sequence should be as the diagram below

a. Power on sequence:



b. Power off sequence:

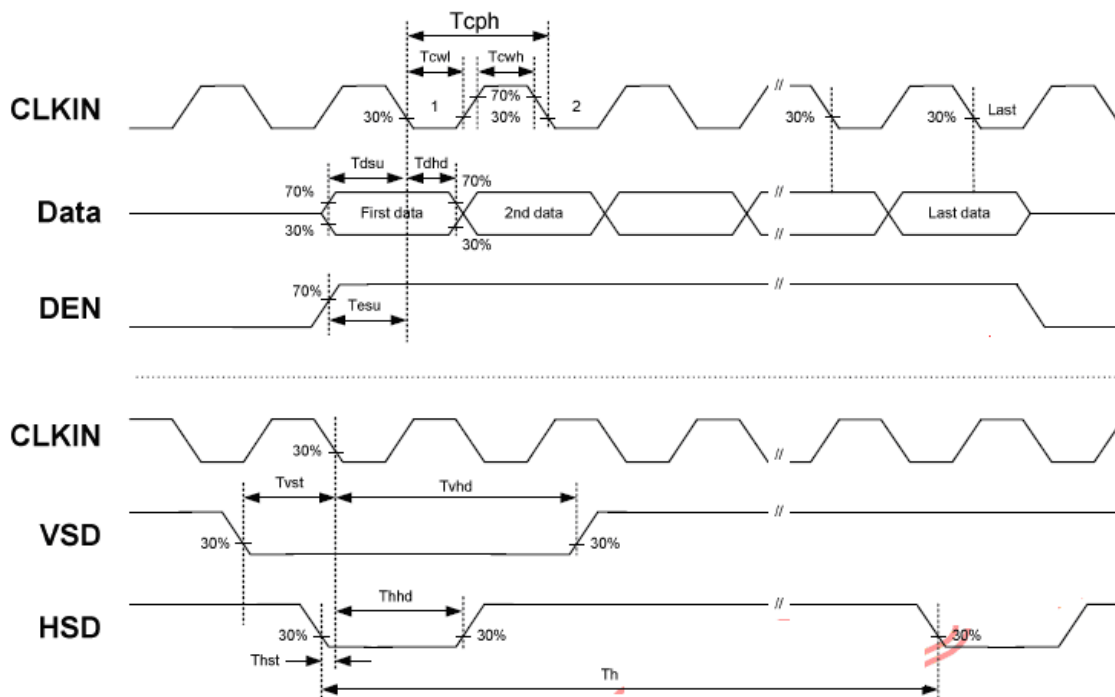


9. INTERFACE SPECIFICATIONS

9.1 AC Electrical Characteristics

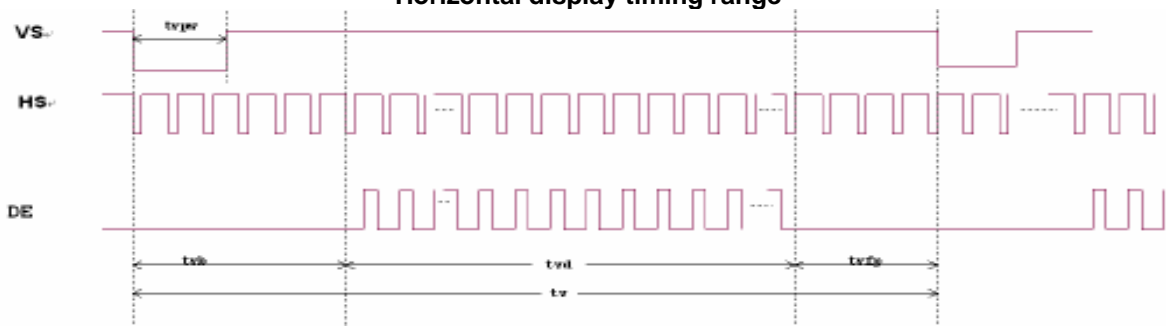
Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
HS setup time	Thst	8	-	-	ns	
HS hold time	Thhd	8	-	-	ns	
VS setup time	Tvst	8	-	-	ns	
VS hold time	Tvhd	8	-	-	ns	
Data setup time	Tdsu	8	-	-	ns	
Data hole time	Tdhd	8	-	-	ns	
DE setup time	Tesu	8	-	-	ns	
DE hole time	Tehd	8	-	-	ns	
DVDD Power On Slew rate	TPOR	-	-	20	ms	From 0 to 90% DVDD
RESET pulse width	TRst	1	-	-	ms	
DCLK cycle time	Tcoh	20	-	-	ns	
DCLK pulse duty	Tcwh	40	50	60	%	

9.2 Timing Diagram





Horizontal display timing range



Vertical timing

9.3 Timing

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Horizontal Display Area	thd	-	800	-	DCLK	
DCLK Frequency	fclk	26.4	33.3	46.8	MHz	
One Horizontal Line	th	862	1056	1200	DCLK	
HS pulse width	thpw	1	-	40	DCLK	
HS Blanking	thb	46	46	46	DCLK	
HS Front Porch	thfp	16	210	354	DCLK	

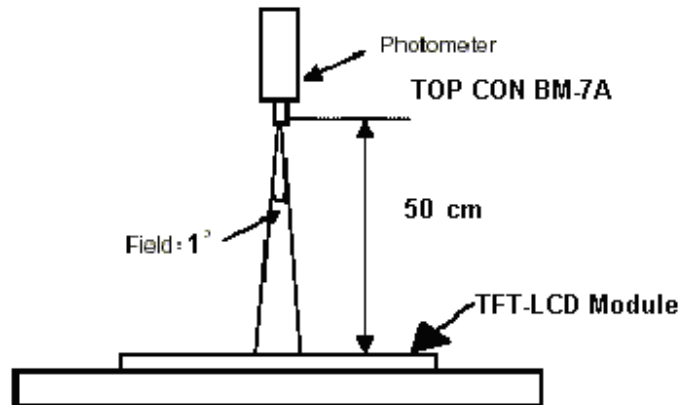
Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Vertical Display Area	tvd	-	480	-	TH	
VS period time	tv	510	525	650	TH	
VS pulse width	tvpw	1	-	20	TH	
VS Blanking	tvb	23	23	23	TH	
VS Front Porch	tvfp	7	22	147	TH	

10. OPTICAL CHARACTERISTIC

Parameter		Symbol	Condition	MIN.	TYP.	MAX.	Unit	Remarks
Viewing Angle	Horizontal	θ_{x+}	Center CR \geq 10	60	70	--	deg	Note 1,4
		θ_{x-}		60	70	--		
	Vertical	θ_{y+}		40	50	--		
		θ_{y-}		60	70	--		
Contrast Ratio		CR	at optimized viewing angle	400	500			Note 1,3
Response time	Rise	Tr	Center	-	10	20	ms	Note 1,6
	Fall	Tf	$\theta_x=\theta_y=0^\circ$	-	15	30	ms	
Uniformity		B-uni	$\theta_x=\theta_y=0^\circ$	70	75	--	%	Note1,5
Center Brightness		L	$\theta_x=\theta_y=0^\circ$	280	350	--	cd/m ²	Note 1,2
Chromaticity		x_w	Center	0.26	0.31	0.36		Note 1,7
		y_w	$\theta_x=\theta_y=0^\circ$	0.28	0.33	0.38		

The following optical specifications shall be measured in a darkroom or equivalent state (ambient luminance \leq 1 lux, and at room temperature). The operation temperature is 25°C \pm 2°C. The LED current IF=40mA. The measurement method is shown in Note1.

Note1: The method of optical measurement:

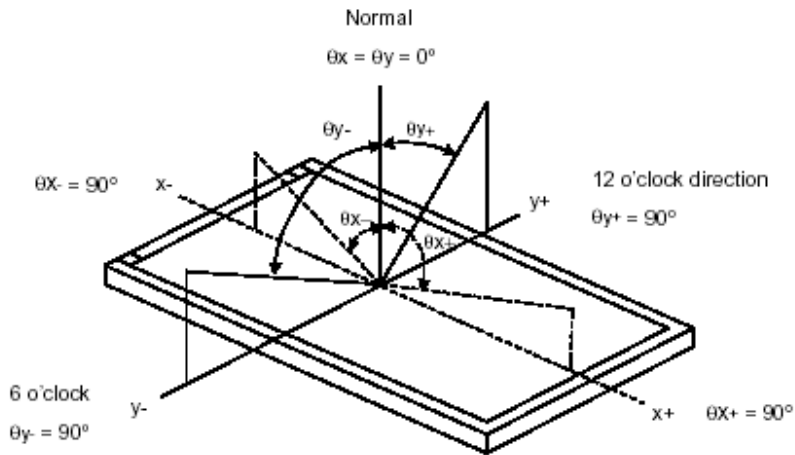


Note2: Measured at the center area of the panel and at the viewing angle of the $\theta_x = \theta_y = 0^\circ$

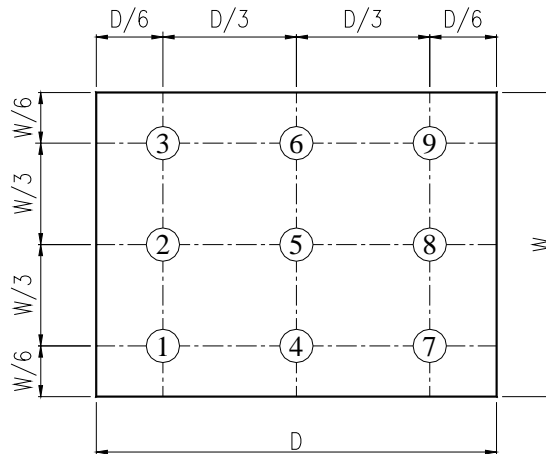
Note3: Definition of Contrast Ratio (CR):

$$CR = \frac{\text{Luminance with all pixels in white state}}{\text{Luminance with all pixels in Black state}}$$

Note4: Definition of Viewing Angle



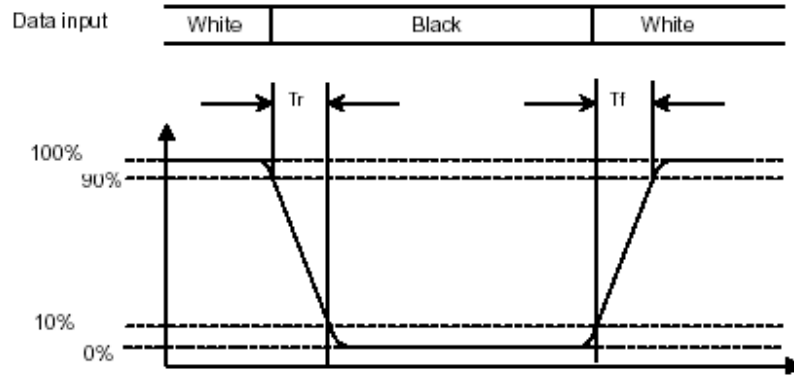
Note 5: Definition of Brightness Uniformity (B-uni):



$$B\text{-uni} = \frac{\text{Minimum luminance of 9 points}}{\text{Maximum luminance of 9 points}} \quad (\text{Note 5}).$$

Note6: Definition of Response Time:

The Response Time is set initially by defining the “Rising Time (Tr)” and the “Falling Time (Tf)” respectively. Tr and Tf are defined as following figure.



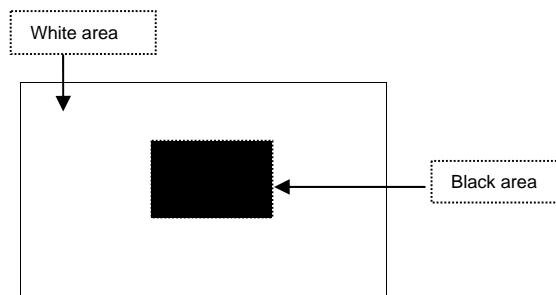
Note 7: Definition of Chromaticity:

The color coordinates (x_W, y_W) , (x_R, y_R) , (x_G, y_G) , and (x_B, y_B) are obtained with all pixels in the viewing field at white, red, green, and blue states, respectively.

Note 8: Definition of Image sticking (tis):

Continuously display the test pattern shown in the figure below for 2 hours. Then display a completely white screen. The previous image shall not persist more than 2 sec at 25 °C

Image sticking pattern



11. QUALITY ASSURANCE

11.1 Test Condition

11.1.1 Temperature and Humidity (Ambient Temperature)

Temperature : $25 \pm 5^{\circ}\text{C}$

Humidity : $65 \pm 5\%$

11.1.2 Operation

Unless specified otherwise, test will be conducted under function state.

11.1.3 Container

Unless specified otherwise, vibration test will be conducted to the product itself without putting it in a container.

11.1.4 Test Frequency

In case of related to deterioration such as shock test. It will be conducted only once.

11.1.5 Test Method

No.	Reliability Test Item & Level	Test Level	Remark
1	High Temperature Storage Test	T=80°C,240hrs	IEC68-2-2
2	Low Temperature Storage Test	T=-30°C,240hrs	IEC68-2-1
3	High Temperature Operation Test	T=70°C,240hrs	IEC68-2-2
4	Low Temperature Operation Test	T=-20°C,240hrs	IEC68-2-1
5	High Temperature and High Humidity Operation Test	T=60°C,90% RH,240hrs	IEC68-2-3
6	Thermal Cycling Test (No operation)	-30°C → +25°C → +80°C,200 Cycles 30 min 5min 30 min	IEC68-2-14
7	vibration test	Frequency:10~55HZ Amplitude:1.5mm Sweep time:11min Test period:6Cycles for each direction of X,Y,Z	IEC68-2-6
8	Shock test	100G,6ms,Direction:±X±Y±Z Cycle:3times	IEC68-2-27
9	Drop test	Height :60cm 1 conner,3edges,6surfaces	IEC68-2-32
10	ESD test	State: operating Location: LCM/TP surface Condition:150pf 330Ω Contact +/- 8kV Air +/-15kV Criteria: Class C	IEC61000-4-2

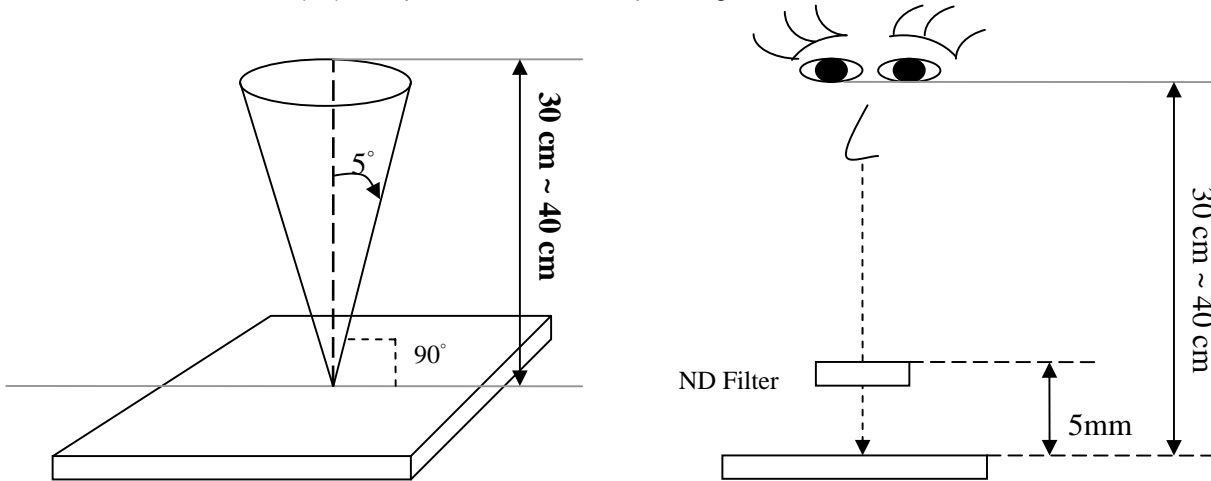
11.2 Inspection condition

11.2.1 Inspection conditions

11.2.1.1 Inspection Distance : 35 ± 5 cm

11.2.1.2 View Angle :

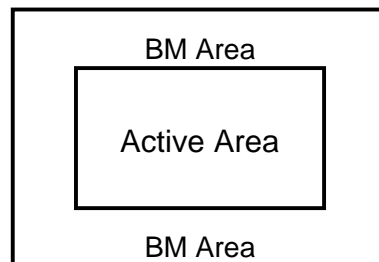
- (1) Inspection under operating condition : $\pm 5^\circ$
- (2) Inspection under non-operating condition : $\pm 45^\circ$



11.2.2 Environment conditions :

Ambient Temperature :		$25 \pm 5^\circ\text{C}$
Ambient Humidity :		$65 \pm 5\%$
Ambient Illumination	Cosmetic Inspection	More than 600lux
	Functional Inspection	300 ~ 800lux

11.2.3 Definition of applicable Zones



11.2.4 Inspection Parameters

No.	Parameter	Criteria																		
1	Operating	Display function: No Display malfunction (Major)																		
		Contrast ratio (Black, White): Does not meet specified range in the spec. (Major) (Note:3)																		
		Line Defect: No obvious Vertical and Horizontal line defect in bright, dark and colored. (Major) (Note:1)																		
		Point Defect (Red, green, blue, dark): Active area ≤ 4 dots (Minor)(Note:1)																		
		<table border="1"> <thead> <tr> <th>Item</th> <th>Acceptable number</th> <th>Total</th> <th>Class Of Defects</th> <th>AQL Level</th> </tr> </thead> <tbody> <tr> <td>Bright</td> <td>2</td> <td rowspan="2">4</td> <td rowspan="4">Minor</td> <td rowspan="4">1.5</td> </tr> <tr> <td>Dark</td> <td>3</td> </tr> <tr> <td>Adjacent Bright</td> <td>1</td> <td>1</td> </tr> <tr> <td>Adjacent Dark</td> <td>1</td> <td>1</td> </tr> </tbody> </table>	Item	Acceptable number	Total	Class Of Defects	AQL Level	Bright	2	4	Minor	1.5	Dark	3	Adjacent Bright	1	1	Adjacent Dark	1	1
		Item	Acceptable number	Total	Class Of Defects	AQL Level														
		Bright	2	4	Minor	1.5														
		Dark	3																	
		Adjacent Bright	1	1																
		Adjacent Dark	1	1																
		Non-uniformity: Visible through 2%ND filter white, R, G, B and gray 50%pattern. (Minor)																		
Foreign material in Black or White spots shape ($W > 1/4L$) (Note: 5)																				
<table border="1"> <thead> <tr> <th>Dimension</th> <th>Acceptable number</th> <th>Class Of Defects</th> <th>AQL Level</th> </tr> </thead> <tbody> <tr> <td>$D \leq 0.3$</td> <td>*</td> <td rowspan="3">Minor</td> <td rowspan="3">1.5</td> </tr> <tr> <td>$0.3 < D \leq 0.5$</td> <td>3</td> </tr> <tr> <td>$D > 0.5$</td> <td>0</td> </tr> </tbody> </table>	Dimension	Acceptable number	Class Of Defects	AQL Level	$D \leq 0.3$	*	Minor	1.5	$0.3 < D \leq 0.5$	3	$D > 0.5$	0								
Dimension	Acceptable number	Class Of Defects	AQL Level																	
$D \leq 0.3$	*	Minor	1.5																	
$0.3 < D \leq 0.5$	3																			
$D > 0.5$	0																			
$D = (\text{Long} + \text{Short}) / 2$ * : Disregard																				
Foreign Material in Line or spiral shape ($W \leq 1/4L$) (Note: 4)																				
<table border="1"> <thead> <tr> <th>Dimension</th> <th>Acceptable number</th> <th>Class Of Defects</th> <th>AQL Level</th> </tr> </thead> <tbody> <tr> <td>$W > 0.1\text{mm}, L > 5\text{mm}$</td> <td>0</td> <td rowspan="3">Minor</td> <td rowspan="3">1.5</td> </tr> <tr> <td>$L \leq 5\text{mm}, 0.05\text{mm} < W \leq 0.1\text{mm}$</td> <td>3</td> </tr> <tr> <td>$L \leq 5\text{mm}, W < 0.05\text{mm}$</td> <td>*</td> </tr> </tbody> </table>	Dimension	Acceptable number	Class Of Defects	AQL Level	$W > 0.1\text{mm}, L > 5\text{mm}$	0	Minor	1.5	$L \leq 5\text{mm}, 0.05\text{mm} < W \leq 0.1\text{mm}$	3	$L \leq 5\text{mm}, W < 0.05\text{mm}$	*								
Dimension	Acceptable number	Class Of Defects	AQL Level																	
$W > 0.1\text{mm}, L > 5\text{mm}$	0	Minor	1.5																	
$L \leq 5\text{mm}, 0.05\text{mm} < W \leq 0.1\text{mm}$	3																			
$L \leq 5\text{mm}, W < 0.05\text{mm}$	*																			
L : Length W : Width * : Disregard																				
2	External Inspection (non-operating)	Dimension: Outline (Major)																		
		Bezel appearance: uneven (Minor)																		
		Scratch on the polarize & Touch Panel: (Note:2)																		
		<table border="1"> <thead> <tr> <th>Dimension</th> <th>Acceptable number</th> <th>Class Of Defects</th> <th>AQL Level</th> </tr> </thead> <tbody> <tr> <td>$W > 0.1\text{mm}, L > 5\text{mm}$</td> <td>0</td> <td rowspan="3">Minor</td> <td rowspan="3">1.5</td> </tr> <tr> <td>$L \leq 5\text{mm}, 0.05\text{mm} < W \leq 0.1\text{mm}$</td> <td>3</td> </tr> <tr> <td>$L \leq 5\text{mm}, W < 0.05\text{mm}$</td> <td>*</td> </tr> </tbody> </table>	Dimension	Acceptable number	Class Of Defects	AQL Level	$W > 0.1\text{mm}, L > 5\text{mm}$	0	Minor	1.5	$L \leq 5\text{mm}, 0.05\text{mm} < W \leq 0.1\text{mm}$	3	$L \leq 5\text{mm}, W < 0.05\text{mm}$	*						
		Dimension	Acceptable number	Class Of Defects	AQL Level															
$W > 0.1\text{mm}, L > 5\text{mm}$	0	Minor	1.5																	
$L \leq 5\text{mm}, 0.05\text{mm} < W \leq 0.1\text{mm}$	3																			
$L \leq 5\text{mm}, W < 0.05\text{mm}$	*																			
L : Length W : Width * : Disregard																				

		Dent and spots shape on the polarize (Note:2): (Note: 5)		
		Dimension	Acceptable number	Class Of Defects
		D ≤ 0.3	*	Minor
		0.3 < D ≤ 0.5	3	
D > 0.5	0			
D = (Long + Short) / 2 * : Disregard				

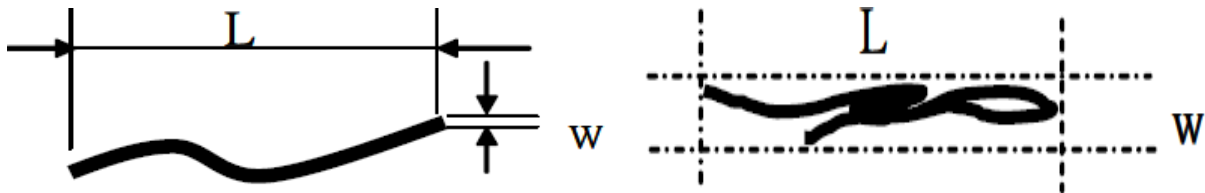
Class of defects	Major	AQL 0.65	Definition It is a defect that is likely to result in failure or to reduce materially the usability of the product for the intended function.
	Minor	AQL 1.5	It is a defect that will not result in functioning problem with deviation classified.

Note:1.(a)Bright point defect is defined as point defect of R,G,B with area >1/2 pixel respectively
 (b)Dark point defect is defined as visible in full white pattern.
 (c)The point defect must under 2% ND Filter visible.

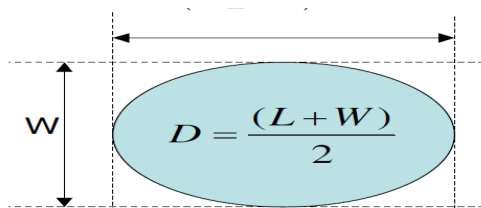
Note:2 The external inspection should be conducted at the distance 30± 5cm between the eyes of inspector and the panel .

Note:3 Luminance measurement for contrast ratio is at the distance 50± 5cm between the detective head and the panel with ambient luminance less than 1 lux. Contrast ratio is obtained at optimum view angle.

Note:4 W-Width in mm , L-length of Max.(L1,L2) in mm.



Note:5 Spot Foreign Material ($W \geq L/4$)



11.3 Sampling Condition

Unless otherwise agree in written, the sampling inspection shall be applied to the incoming inspection of customer.

Lot size: Quantity of shipment lot per model.

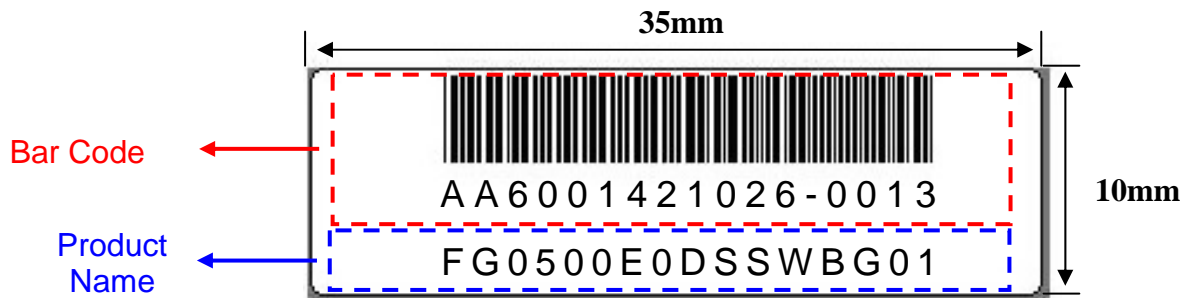
Sampling type: normal inspection, single sampling

Sampling table: MIL-STD-105E

Inspection level: Level II

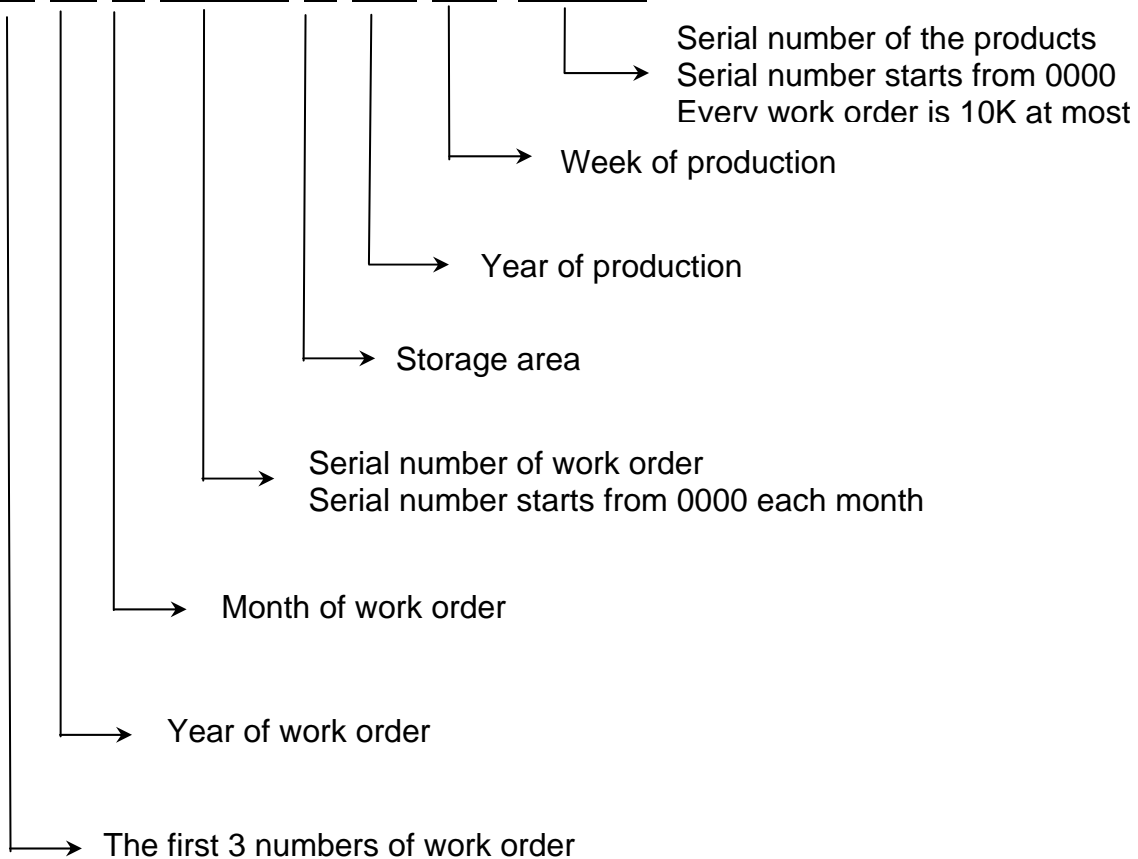
12. LCM PRODUCT LABEL DEFINE

Product Label style:

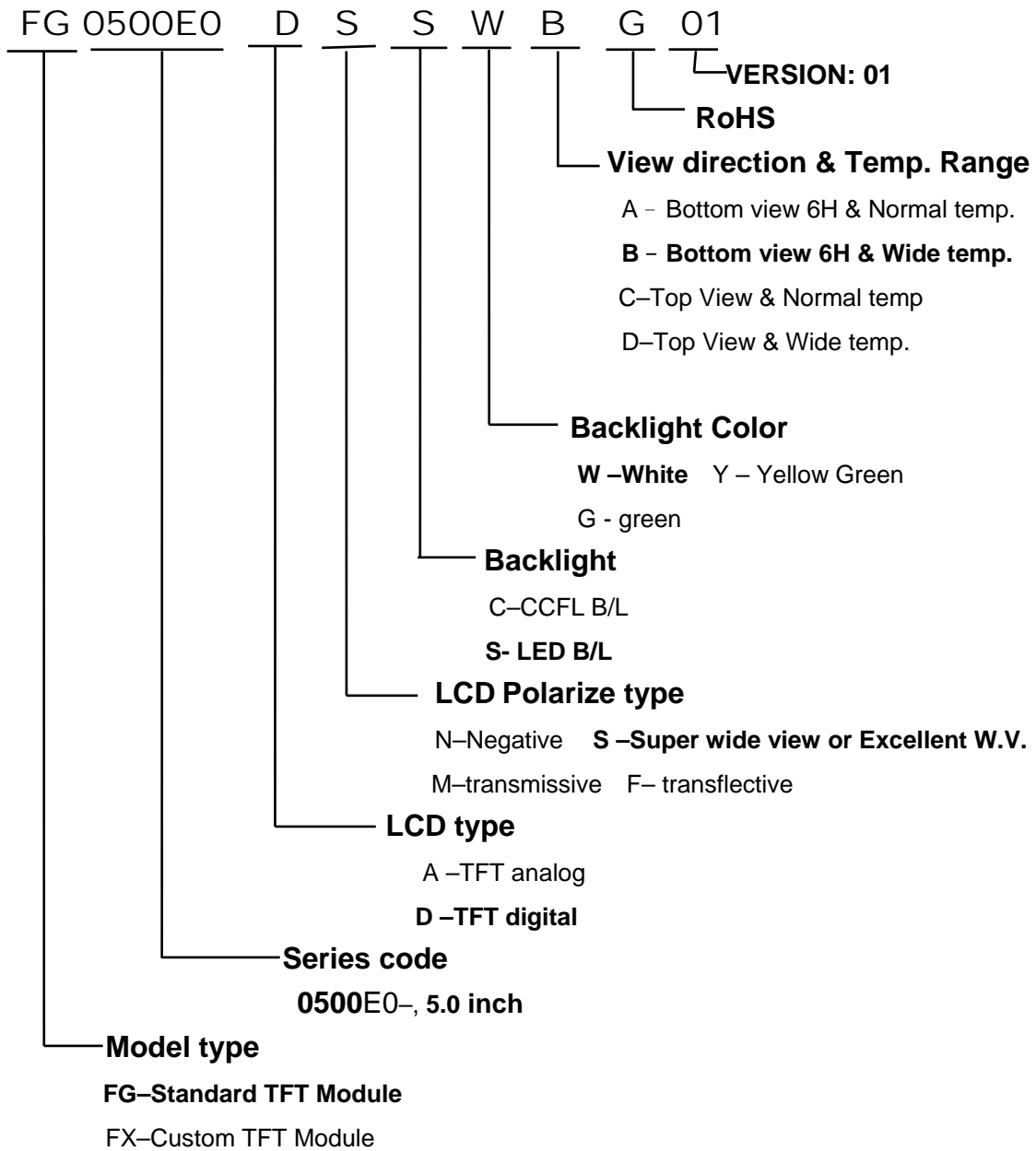


BarCode Define:

A A 6 0014 2 10 26-0013



Product Name Define:



13. PRECAUTION FOR USING LCM

1. ASSEMBLY PRECAUTIONS

- (1) You must mount a module using holes arranged in four corners or four sides.
- (2) You should consider the mounting structure so that uneven force (ex. Twisted stress) is not applied to the module. And the case on which a module is mounted should have sufficient strength so that external force is not transmitted directly to the module.
- (3) Do not touch, push or rub the exposed polarizers with glass, tweezers or anything harder than HB pencil lead. And please do not rub with dust clothes with chemical treatment.
- (4) Wipe off saliva or water drops as soon as possible. Their long time contact with polarizer causes deformations and color fading.
- (5) Do not open the case because inside circuits do not have sufficient strength.
- (6) Please do not take a LCD module to pieces and reconstruct it. Resolving and reconstructing modules may cause them not to work well.
- (7) Please do not touch metal frames with bare hands and soiled gloves. A color change of the metal frames can happen during a long preservation of soiled LCD modules.
- (8) Please pay attention to handling lead wire of backlight so that it is not tugged in connecting with inverter.

2. OPERATING PRECAUTIONS

- (1) Please be sure to turn off the power supply before connecting and disconnecting signal input cable.
- (2) Please do not change variable resistance settings in LCD module. They are adjusted to the most suitable value. If they are changed, it might happen LCD does not satisfy the characteristics specification
- (3) Be careful for condensation at sudden temperature change. Condensation makes damage to polarizer or electrical contacted parts. And after fading condensation, smear or spot will occur.
- (4) When fixed patterns are displayed for a long time, remnant image is likely to occur.
- (5) Module has high frequency circuits. Sufficient suppression to the electromagnetic interference shall be done by system manufacturers. Grounding and shielding methods may be important to minimize the interference.
- (6) Please consider that LCD backlight takes longer time to become stable of radiation characteristics in low temperature than in room temperature.

3. ELECTROSTATIC DISCHARGE CONTROL

- (1) The operator should be grounded whenever he/she comes into contact with the module. Never touch any of the conductive parts such the copper leads on the PCB and the interface terminals with any

parts of the human body.

- (2) The modules should be kept in antistatic bags or other containers resistant to static for storage.
- (3) Only properly grounded soldering irons should be used.
- (4) If an electric screwdriver is used, it should be well grounded and shielded from commutator sparks.
- (5) The normal static prevention measures should be observed for work clothes and working benches; for the latter conductive (rubber) mat is recommended
- (6) Since dry air is inductive to statics, a relative humidity of 50-60% is recommended.

4. STORAGE PRECAUTIONS

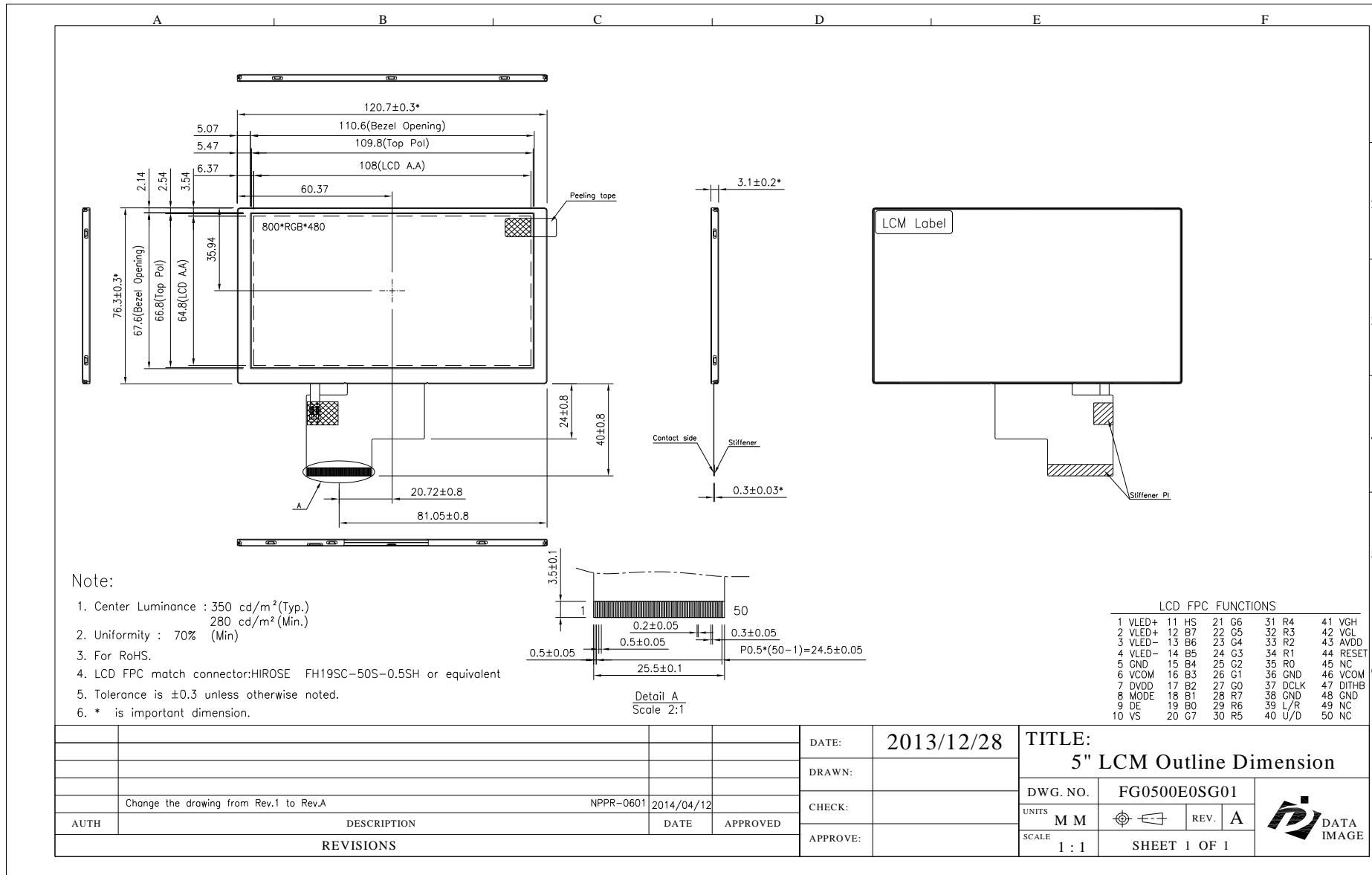
- (1) When you store LCDs for a long time, it is recommended to keep the temperature between 0°C-40°C without the exposure of sunlight and to keep the humidity less than 90%RH.
- (2) Please do not leave the LCDs in the environment of high humidity and high temperature such as 60°C 90%RH
- (3) Please do not leave the LCDs in the environment of low temperature; below -20°C.

5. OTHERS

- (1) A strong incident light into LCD panel might cause display characteristics' changing inferior because of polarizer film, color filter, and other materials becoming inferior. Please do not expose LCD module direct sunlight and strong UV rays
- (2) Please pay attention to a panel side of LCD module not to contact with other materials in preserving it alone.
- (3) For the packaging box, please pay attention to the followings:
 - (4) Please do not pile them up more than 5 boxes. (They are not designed so.) And please do not turn over.
 - (5) Please handle packaging box with care not to give them sudden shock and vibrations. And also please do not throw them up.
 - (6) Packing box and inner case for LCDs are made of cardboard. So please pay attention not to get them wet. (Such like keeping them in high humidity or wet place can occur getting them wet.)

6. LIMITED WARRANTY

Unless otherwise agreed between DATA IMAGE and customer, DATA IMAGE will replace or repair any of its LCD and LCM which is found to be defective electrically and visually when inspected in accordance with DATA IMAGE acceptance standards, for a period on one year from date of shipment. Confirmation of such date shall be based on freight documents. The warranty liability of DATA IMAGE is limited to repair and/or replacement on the terms set forth above. DATA IMAGE will not be responsible for any subsequent or consequential events.

14. OUTLINE DRAWING


15. PACKAGE INFORMATION

T.B.D.