承认(规格)书
Specification Sheet

客戶 :
(Customer Name) _____

品名:
(Material Name) 236N01

料号:
(Material Number) _____

客户订单名称:
(Maker Name) _____

规格书版本:
(Spec Approval Sheet Version) V 1.0

客户承认 Customer		承认 Shijikeguan	
Approved by *承认*	***Checked by*** *审核*	***Approved by*** *承认*	
		Checked by *审核*	
		Designed by *编写*	

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版本 Version	日期: 年 月 日 Date: YYMMDD	内容 Subject and Reason	记录 Responser
1.0	2017/7/06	初版发行	陈勇强

1.0 SCOPE

This specifications is applicable to double lin digital technology LTD. 's 23.6" diagonal
module :"SL236E "designed for TFT-LCD TV.

1.1 Features

--Super Wide viewing angle
--Super High contrast ratio
--Super Fast response time
--High color saturation
--DE(Data Enable) only mode
--LVDS Interface
--RoHS compliance

1.2 Application

TFT-LCD TV
Multi-Media Display

1.3 General Specifications

Item	Specifications	Unit	Note
Driving Method	a-Si TFT active matrix		Note 1
Active Area	521.28(H) x293.22(V)	mm	
Screen diagonal(in)	23.6	in	
Number of Pixels	1920 x1080	pixel	
Pixel pitch	0.2715(H) x 0.2715(V)	mm	
Pixel arrangement	RGB Vertical stripe		
Transmissive Mode	Normally black		
Surface Treatment	Haze 25%, 3H		
Display Colors	8-bit (D), 16.7M	color	

1.4 Mechanical Specification

Item		Min	Typ	Max	Unit	Note
Weight			TB D		g	-
Module Size	Horizontal(H)	(TYP)-0.5	544.8	(TYP)+0.5	mm	to inverter cover
	Vertical (V)		320.5		mm	
	Depth(D)		11.8		mm	

Note 1: Please refer to the"outline dimension" for more information of back and front outline dimensions.

2.0 ABSOLUTE MAXIMUM RATINGS

2.1 Absolute Maximum Ratings (TA = 25 ± 2 °C)

The followings are maximum values which, if exceeded, may cause damage to the unit.

Item	Symbol	ValueValue Value		Unit
		Min.	Max.	
Power Supply Voltage	VCC	-0.3	5.5	V
Input Signal Voltage	VIN	-0.3	VDD+0.3	V

2.2 Environment Requirement (Based on CSOT's BLU)

(1)Temperature and relative humidity range are shown as below.

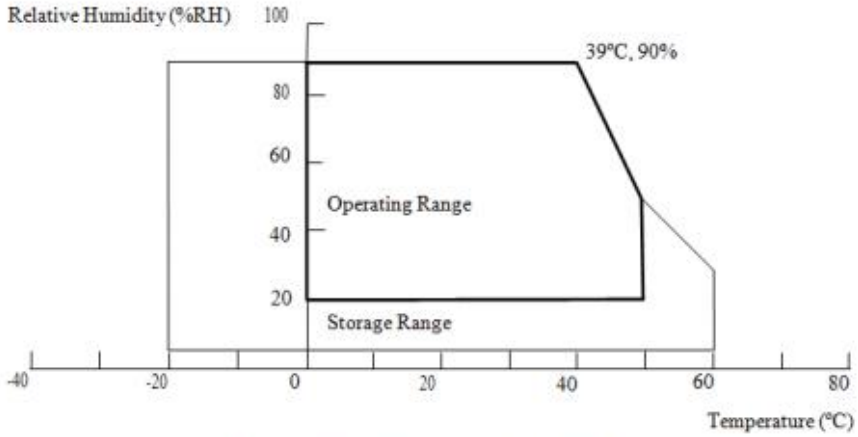


Fig. 2.1 Operating and storage environment

(a) 90%RH maximum (TA ≤ 39 °C).

(b) Wet-bulb temperature should be 39ºC maximum (TA > 39 ºC).

(c) No condensation

(2) The storage temperature is between - 20 ºC to 60 ºC, and the operating ambient temperature is between 0 ºC to 50 ºC

The maximum operating temperature is based on the test condition that the surface temperature of display area is less than or equal to 65ºC with LCD module in a temperature controlled chamber alone. Thermal management should be considered in final product design to prevent the surface temperature of display area from being over 65ºC. The range of operating temperature may degrade in case of improper thermal management in the end product design.

(3) The rating of environment is based on LCD module. Leave LCD cell alone, this environment condition can't be guaranteed. Except LCD cell, the customer has to consider the ability of other parts of LCD module and LCD module process.

2.3 Absolute Ratings of Environment (Open Cell)

When storing open cell as spares for a long time, please follow the precaution instructions:

(1) Do not store the module in high temperature and high humidity for a long time. It is highly recommended to store the module with temperature from 20ºC to 30ºC in normal humidity (50 ± 10%RH) with shipping package.

(2) The open cell should be keep within one month shelf life.

3.0 ELECTRICAL SPECIFICATIONS

3.1Electrical Specifications

Parameter		Min.	Typ.	Max.	Unit	Remarks
Power Supply Voltage	V_{DD}	4.5	5.0	5.5	V	Note1
Power Supply Current	I_{DD}	-	TBD	TBD	mA	
In-Rush Current	I_{RUSH}	-	-	5.0	A	Note 2
Permissible Input Ripple Voltage	V_{RF}	-	-	300	mV	Note1,3
High Level Differential Input Threshold Voltage	V_{IH}	-	-	+100	mV	
Low Level Differential Input Threshold Voltage	V_{IL}	-100	-	-	mV	
Differential input voltage	$\|V_{ID}\|$	200	-	600	mV	
Differential input common mod e voltage	Vcm	1.0	1.2	1.5		V_{IH}=100mV, V_{IL}=-100mV
Power Consumption	P_D	-	4.5	5.5	W	
	P_{BL}	8.21	22.68	23.94	W	Note 4
	P_{total}	-	TBD	TBD	W	

Notes : 1. The supply voltage is measured and specified at the interface connector of LCM.

The current draw and power consumption specified is for VDD=5.0V, Frame rate=60Hz

Clock frequency = 92.9 MHz. Test Pattern of power supply current

a) Typ : Color Test

b) Max : Skip Subpixel255

2. Duration of rush current is about 2 ms and rising time of VDD is 520 μs ± 20 %

3. Ripple Voltage should be covered by Input voltage Spec.

4. Calculated value for reference (Input pins*VPIN ×IPIN) excluding inverter loss.

3.2 LVDS Interface

	Input Signal	Transmitter		Interface		MV236FHB-N10 (CN11)	Remark
		Pin No.	Pin No.	System (Tx)	TFT-LCD (Rx)	Pin No.	
LVDS	OR0	51	48 47	OUT0- OUT0+	RXO0- RXO0+	1 2	
	OR1	52					
	OR2	54					
	OR3	55					
	OR4	56					
	OR5	3					
	OG0	4					
	OG1	6	46 45	OUT1- OUT1+	RXO1- RXO1+	3 4	
	OG2	7					
	OG3	11					
	OG4	12					
	OG5	14					
	OB0	15					
	OB1	19					
	OB2	20	42 41	OUT2- OUT2+	RXO2- RXO2+	5 6	
	OB3	22					
	OB4	23					
	OB5	24					
	Hsync	27					
	Vsync	28					
	DE	30		CLK	RXO		
	MCLK	31	40 39	OUT- CLK	CLK- RXO	8 9	
	OR6	50	38 37	OUT+ OUT3- OUT3+	CLK+ RXO3- RXO3+	10 11	
	OR7	2					
	OG6	8					
	OG7	10					
	OB6	16					
	OB7	18					
	RSVD	25					

4.0 OPTICAL SPECIFICATION

Optical characteristics are determined after the unit has been 'ON' and stable in a dark environment at 25±2℃. The values are specified at distance 50cm from the LCD surface at a viewing angle of and equal to 0 °.

FIG. 1 shows additional information concerning the measurement equipment and method.4.2 Optical Specifications

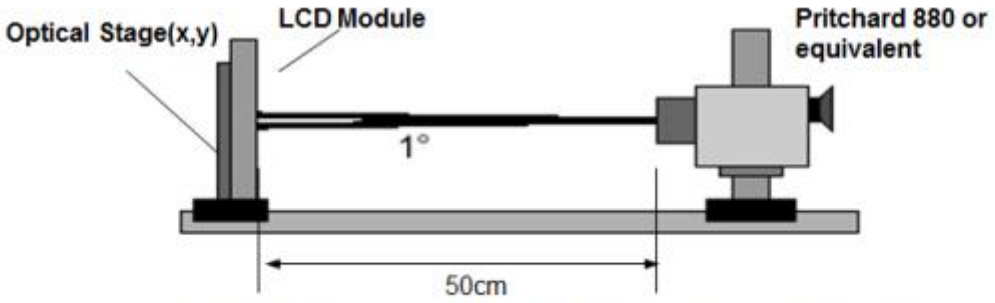


FIG. 1 Optical Characteristic Measurement Equipment and Method

3.3Backlight Unit

ITEM	SYMBOL	MIN	TYP	MAX	UNIT	NOTE
LightBar Voltage	V_L	50. 4	—	63	V	DUTY 100%
LightBar Current	I_L	—	360	3 8 0	mA	DUTY 100%
Power Consumption	P_{BL}	—	2 2 . 6 8	—	W	
LED Life Time	L_{BL}	30000	—	—	H	(1)

Note (1) The lifetime is defined as the time which luminance of the LED decays to 50% compared to the initial value, Operating condition: Continuous operating at Ta = 25 ±2℃, IL =240mA

3.3.1 Backlight brightness / Module brightness

Module brightness: ≥250cd//m2

Homogeneity: ≥75%

4.0 OPTICAL SPECIFICATION

Optical characteristics are determined after the unit has been 'ON' and stable in a dark environment at 25±2°C. The values are specified at distance 50cm from the LCD surface at a viewing angle of and equal to 0 °.

FIG. 1 shows additional information concerning the measurement equipment and method.4.2 Optical Specifications

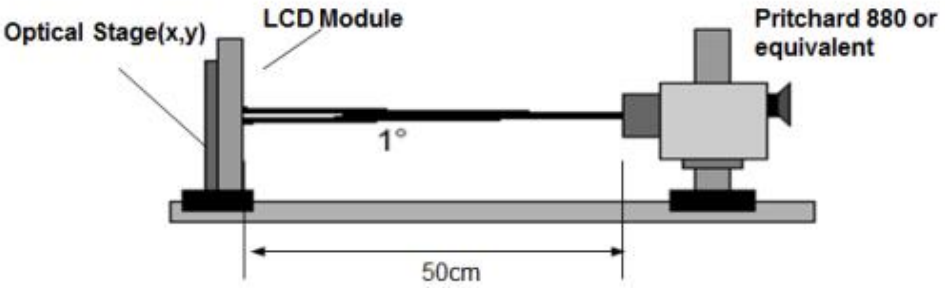
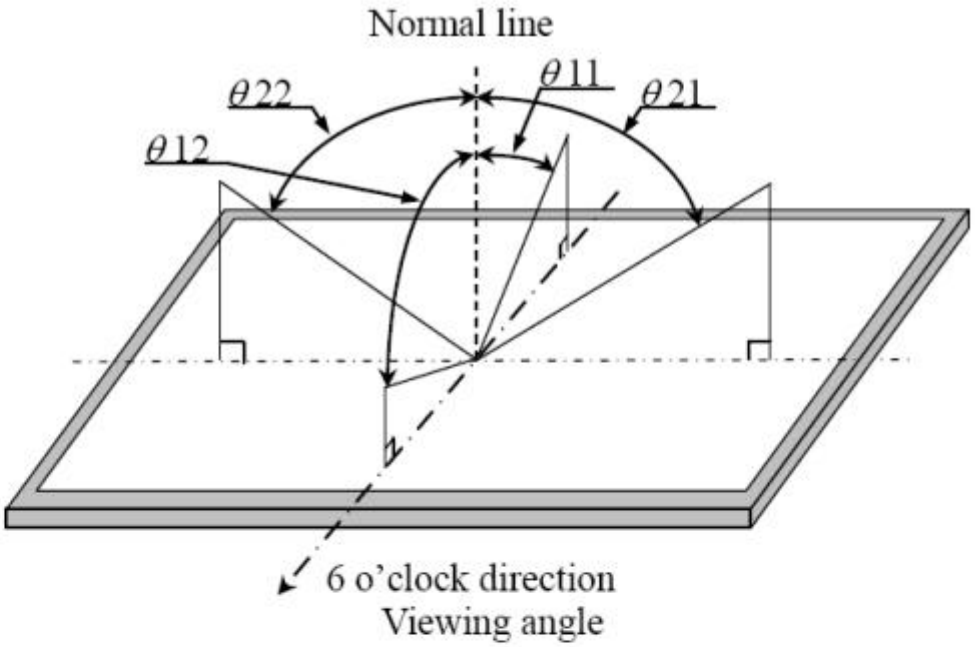


FIG. 1 Optical Characteristic Measurement Equipment and Method

Table 3. OPTICAL CHARACTERISTICS Ta= 25±2°C, VDD,H_VDD,VGH,VGL=typ,fV=60Hz, Light Source : D65 Standard

Item		Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Color Chromaticity (CIE 1931)	Red	Rx	θ =0°, θ Y =0° Viewing Angle at Normal Direction	Typ - 0.03	TBD	Typ + 0.03	-	(1)
		Ry			TBD			
	Green	Gx			TBD			
		Gy			TBD			
	Blue	Bx			TBD			
		By			TBD			
	White	Wx			0.275			
		Wy			0.298			
	Color Gamut	CG			75	-	%	(1)
— Center Luminance of White (Center of Screen)		L		500 Min.	550 Typ.	-	cd/㎡	(1)、(4)
Contrast Ratio		CR		700	1000	-	-	(1)、(2)
Response Time		Tg			14	20	ms	(1)、(3)
White Homogeneity		δW		75%		-	-	(4)、(5)、(6)
Viewing Angle	Horizontal	θ +x	CR ≥10	80	89	-	Deg.	(1)、(3)
		θ -x		80	89	-		
	Vertical	θ +Y		80	89	-		
		θ -Y		80	89	-		

[Note 1] Definitions of viewing angle range:



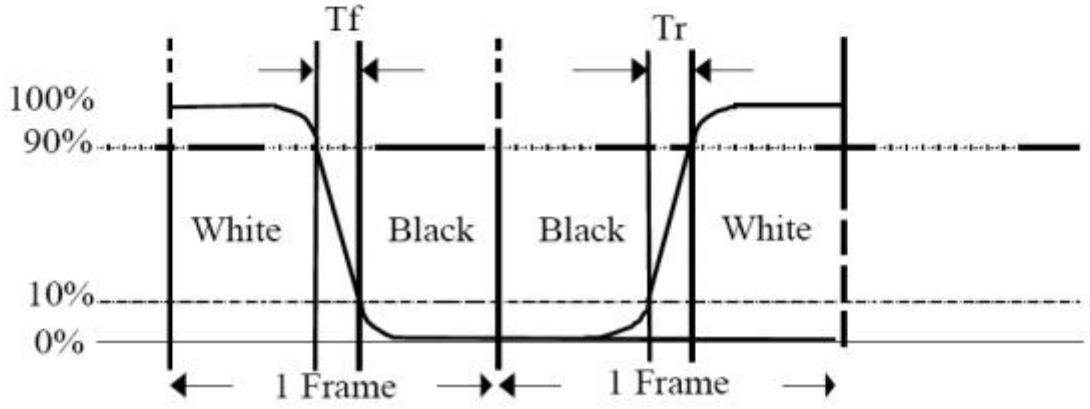
[Note 2] Definition of contrast ratio:

The contrast ratio is defined as the following.

$$\text{Contrast Ratio} = \frac{\text{Luminance (Brightness) with white screen}}{\text{Luminance (Brightness) with black screen}}$$

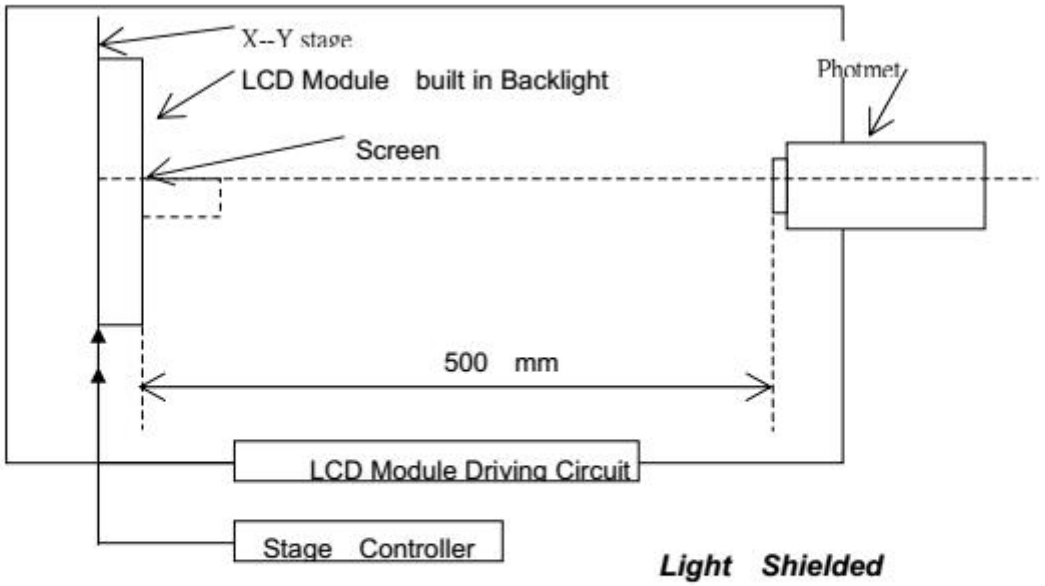
[Note 3] Definition of response time

The output signals of photo detector are measured when the input signals are changed from "Full Black" to "Full White" (rising time, TR), and from "Full White" to "Full Black" (falling time, TF), respectively. The response time is interval between the 10% and 90% (1 frame at 60 Hz) of amplitudes.



Response time=TR + TF

Note 4: The measure method



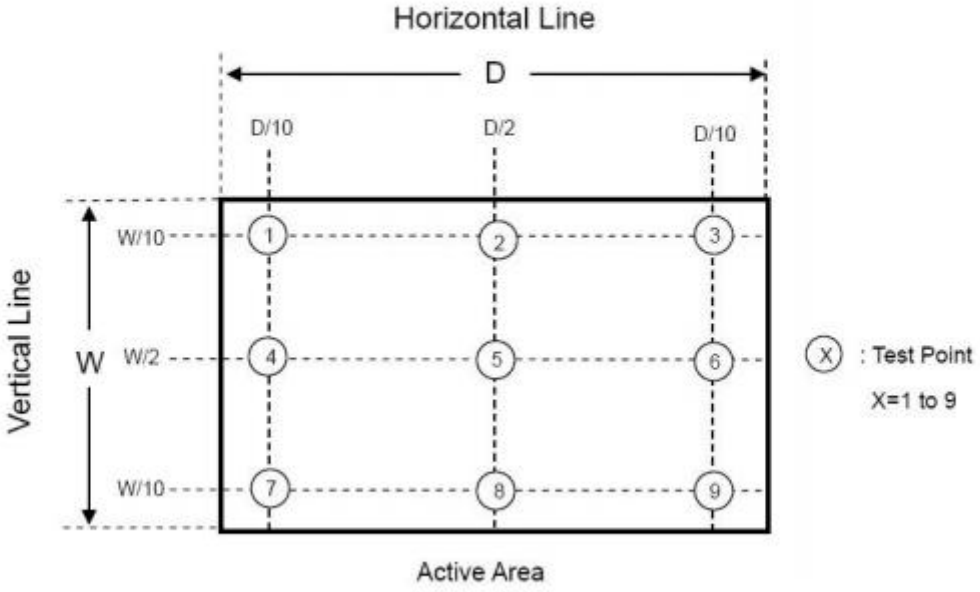
Note (5) Definition of white variation() Measure the luminance of gray level 255 at 9 points Measurement Setup:

The LCD module should be stabilized at given temperature for 30min to avoid abrupt temperature change during measuring. In order to stabilize the luminance, the measurement should be executed after lighting Backlight for 30min in a windless room.

Note (6) Definition of White Variation (δW):

Measure the luminance of gray level 255 at 9 points

δW = Minimum [L (1), L (2), L (3), L (4), L (5) …L (9)] / Maximum [L (1), L (2), L (3), L (4), L (5) …L (9)]



5.0 INTERFACE CONNECTION

5.1 LCD Module

- CN11 Module Side Connector : UJU IS100-L30R-C23or Equivalent
  User Side Connector : JAE FI-X30H or Equivalent

Pin No	Symbol	Function	Remark
1	RXO0-	Negative Transmission data of Pixel 0 (ODD)	
2	RXO0+	Positive Transmission data of Pixel 0 (ODD)	
3	RXO1-	Negative Transmission data of Pixel 1 (ODD)	
4	RXO1+	Positive Transmission data of Pixel 1 (ODD)	
5	RXO2-	Negative Transmission data of Pixel 2 (ODD)	
6	RXO2+	Positive Transmission data of Pixel 2 (ODD)	
7	GND	Ground	
8	RXOC-	Negative Transmission Clock (ODD)	
9	RXOC+	Positive Transmission Clock (ODD)	
10	RXO3-	Negative Transmission data of Pixel 3 (ODD)	
11	RXO3+	Positive Transmission data of Pixel 3 (ODD)	
12	RXE0-	Negative Transmission data of Pixel 0 (EVEN)	
13	RXE0+	Positive Transmission data of Pixel 0 (EVEN)	
14	GND	Ground	
15	RXE1-	Negative Transmission data of Pixel 1 (EVEN)	
16	RXE1+	Positive Transmission data of Pixel 1 (EVEN)	
17	GND	Ground	
18	RXE2-	Negative Transmission data of Pixel 2 (EVEN)	
19	RXE2+	Positive Transmission data of Pixel 2 (EVEN)	
20	RXEC-	Negative Transmission Clock (EVEN)	
21	RXEC+	Positive Transmission Clock (EVEN)	
22	RXE3-	Negative Transmission data of Pixel 3 (EVEN)	
23	RXE3+	Positive Transmission data of Pixel 3 (EVEN)	
24	GND	Ground	Note 1
25	CE	Internal Use	DVR
26	CTL	Internal Use	DVR
27	NC		
28	VDD	Power Supply: +5V	
29	VDD		
30	VDD		

Note 1 : This pin should be connected with GND.

Note:

(1) The direction of pin assignment is shown as below:

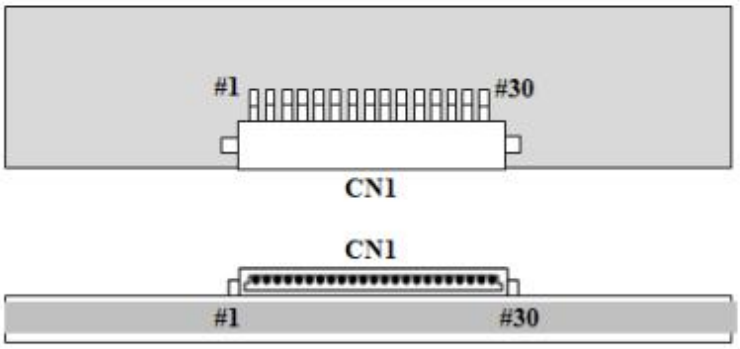


Fig. 4.1 LVDS connector direction sketch map

(2) a. Please let it open (Do not line out from PCBA connector) if it do not used.(for example： TV set)

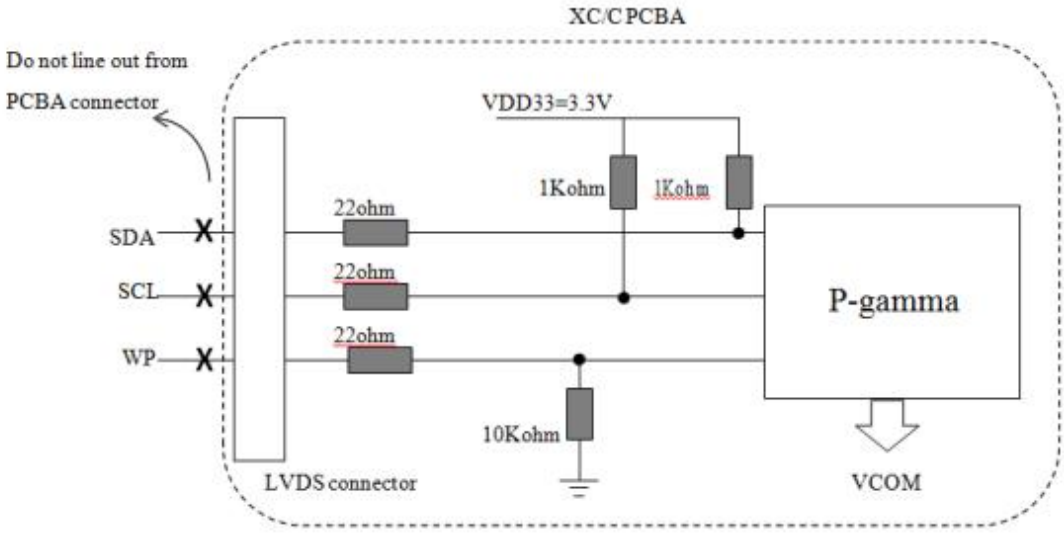


Fig. 4.2 WP/SDA/SCL PCBA set

b. For the VCOM (Flicker) regulation and control, SDA and SCL must pull high in the flicker set, and the flicker set's VDD must ready before the input power (VCC5V)

5.2 LVDS Interface (Tx; THC63LVDF83A or Equivalent)

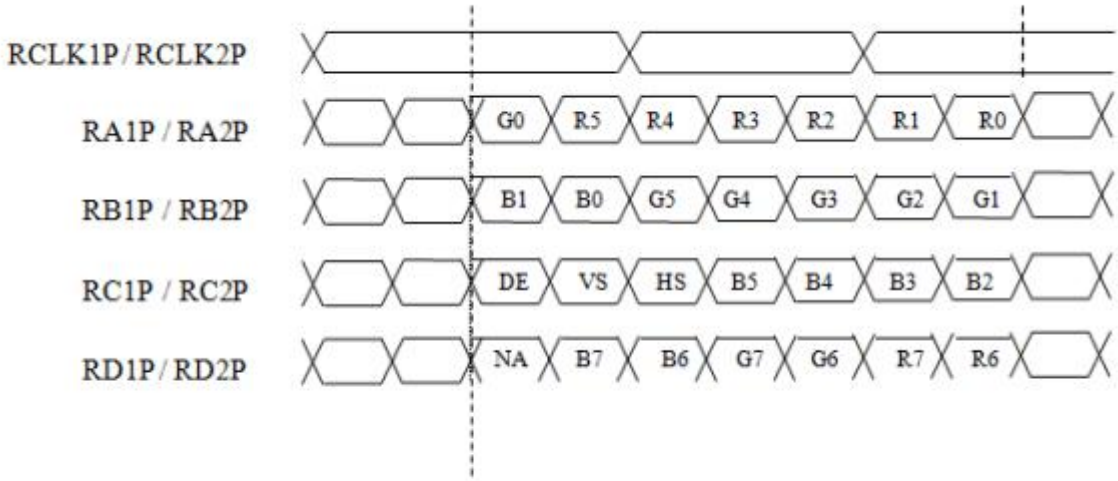


Fig. 4.5 VESA format

6. SIGNAL TIMING SPECIFICATION

6.1 The MV236FHB-N10 is operated by the DE only.

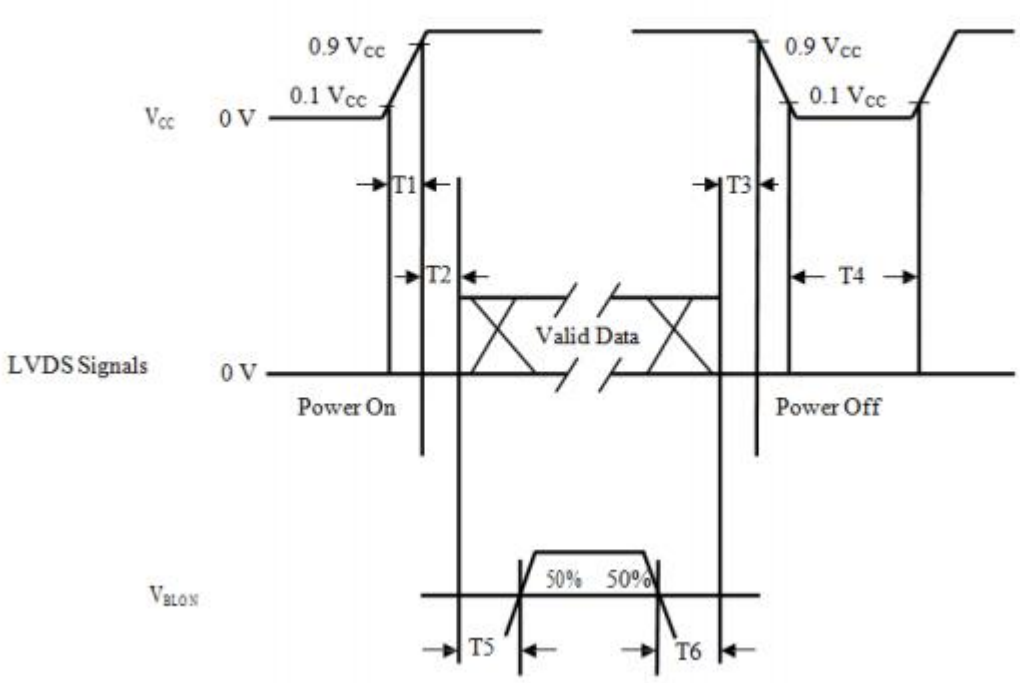
Item	Symbols		Min	Typ	Max	Unit	Note
DCLK	Period	tCLK	11.5	14.9	18.7	ns	
	Frequency	-	53.6	67.3	87.2	MHz	
Hsync	Period	tHP	990	1010	1040	tCLK	
	Horizontal Valid	tHV	960	960	960	tCLK	
	Frequency	fH	48.5	60.6	78	KHz	
Vsync	Period	tVP	1105	1111	1118	tHP	
	Vertical Valid	tVV	1080	1080	1080	tHP	
	Frequency	fV	49	60	75	Hz	
DE (Data Enable)	DE Setup Time	tSI	4	-	-	ns	For DCLK
	DE Hold Time	tHI	4	-	-	ns	
Data	Data Setup Time	tSD	4	-	-	ns	For DCLK
	Data Hold Time	tHD	4	-	-	ns	
LVDS Receiver clock	Input spread spectrum ratio	SSr	-3	-	3	%	

Note: Hsync period and Hsync width-active should be even number times of tCLK. If the value is odd number times of tCLK, display control signal can be asynchronous. In order to operate this LCM a H sync, Vsyn, and DE (data enable) signals should be used.

1. The performance of the electro-optical characteristics may be influenced by variance of the vertical refresh rates.
2. Vsync and Hsync should be keep the above specification.
3. Hsync Period, Hsync Width, and Horizontal Back Porch should be any times of character number (4).
4. The polarity of Hsync, Vsync is not restricted.
5. The Max frequency of 1920X1080 resolution is 82.5Mhz

6.2 Power On/Off Sequence

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



Power on/off sequence

Parameter	Values			Unit
	Min.	Typ.	Max.	Min.
T1	0.5	-	10.0	ms
T2	0.0	-	50	ms
T3	0.0	-	50	ms
T4	1000.0	-	-	ms
T5	500.0	-	-	ms
T6	100.0	-	-	ms

Attention:

(1) The supply voltage of the external system for the open cell input should follow the definition of VCC.

(2) When the customer's backlight turns on before the LCD operation or the LCD turns off before the backlight turns off, the display may momentarily become abnormal screen.

(3) In case that VCC is in off level, please keep the level of input signals on the low or high impedance. If T2 < 0. that may cause electrical overstress.

(4) T4 should be measured after the module has been fully discharged between power off and on period.

(5) Interface signal shall not be kept at high impedance when the power is on.

7. 0 LABELS

7.1 Panel Label

1 Model No:

2 Product Code

A----Open cell Manufacturer（A--AUO，C--CMO，T--CPT，E--BOE，P--IPS,S--SHARP,L-LG）

B----Backlight Type（C--CCFL，E--LED）

C----Brightness Code（H--High Brightness，N--Normal Brightness，L--Low Brightness）

DEF----Product Size（23.6"）

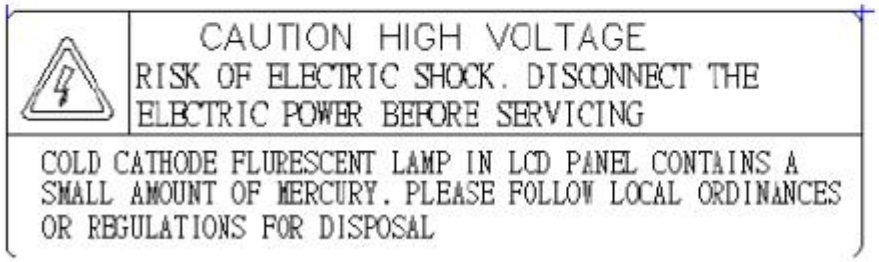
GH----Year（17--2017）　IJ----Week（45--45）　K----Line（1--Line1）

LMNOPQ----Serial Code（000000---999999）

3 Open cell Model: MV236FHB-N10

4 DOUBLE LIN LTD. MADE IN CHINA

7.2 Caution Label



8.0 **目的**

为使背光模组件在采购及检验时有标准依据，特制定此规格书文件

9.0 **范围**

适用于液晶模组 23.6 寸 236N01　LED(备注：72 pcs LED)侧背光, 匹配奇美 M236HJJ-P02 玻璃。

10.0 **职责**

R D:　本规格书之制定与修改

采购：以本规格书为采购依据

Q A:　以本规格为标准执行检测

11.0 **安全规格**

ROHS 基准　环境物质管制基准

12.0 **环境条件**

项目	规格	备注
操作温度（℃）	0－55	
操作湿度（％）	5－95	最大值时温度 40（℃）
储存温度（℃）	-10－60	
储存湿度（℃）	8－90	最大值时温度 50（℃）

13.产品规格

序号 NO.	项目 Item	规格描述 Specification	备注 Remark
1	发光类型 BLU TYP	LED	
2	铁框尺寸 Bezel size	544.8mm*320.5mm*11.8mm	
3	模组尺寸 Moudle size	544.8mm*320.5mm*11.8mm (YTP)	
4	显示区尺寸 Active area	525.2mm*297.2mm	M/F area
5	重量 Weight	TBD	------
6	ROHS	ROHS　compliant	

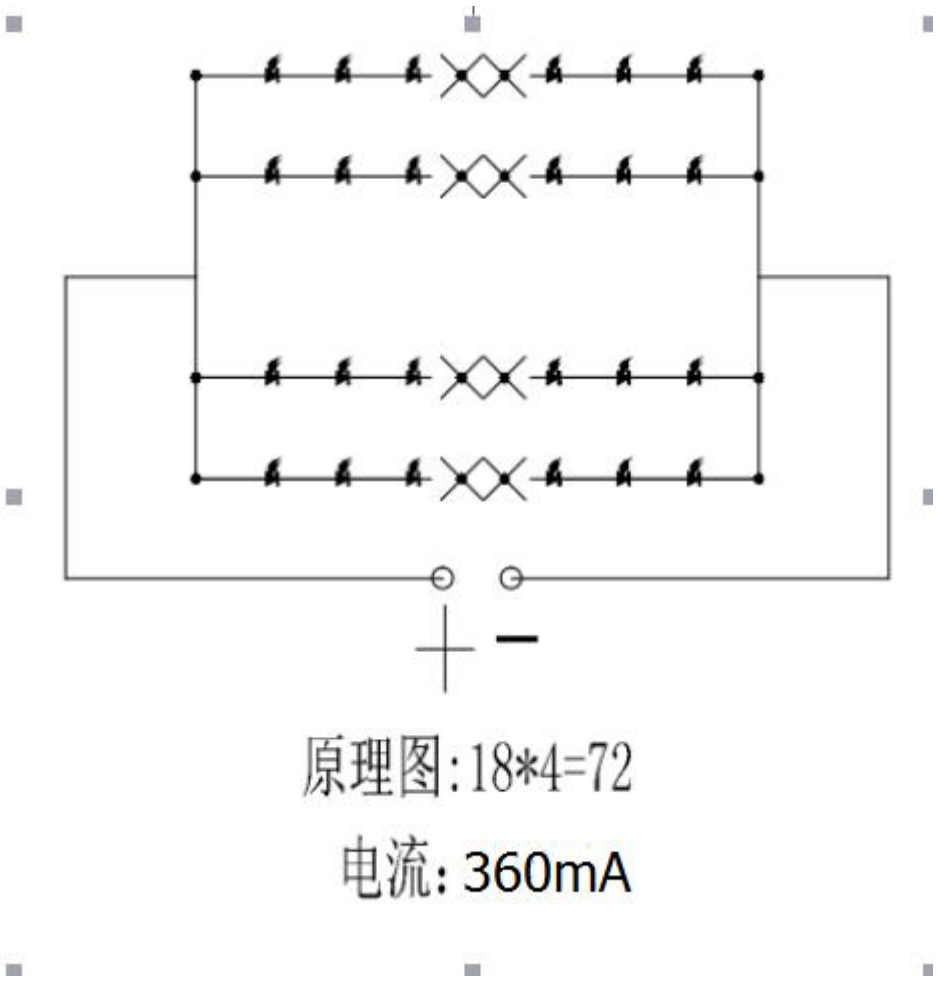
13.1 电气特性

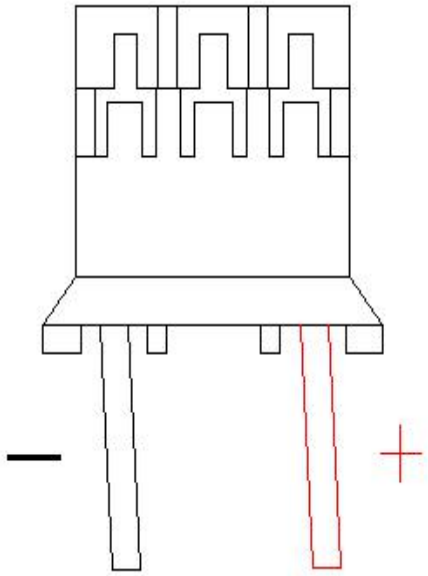
项目 Item	标记 Symbol	条件 Condition	数值 Values			单位 Unit	备注 Remark
			MIN	TYP	MAX		
灯条输入电压 Input lightbar votage	V_{pin}	单条 single	-----	51	57	V	NOTE 1/2
灯条输入电流 Input lightbar current	I_{pin}	单条 single	-----	360	-----	mA	
LED 寿命 Led life Time	Hours	-----	30000	-----	-----		

NOTE 1:

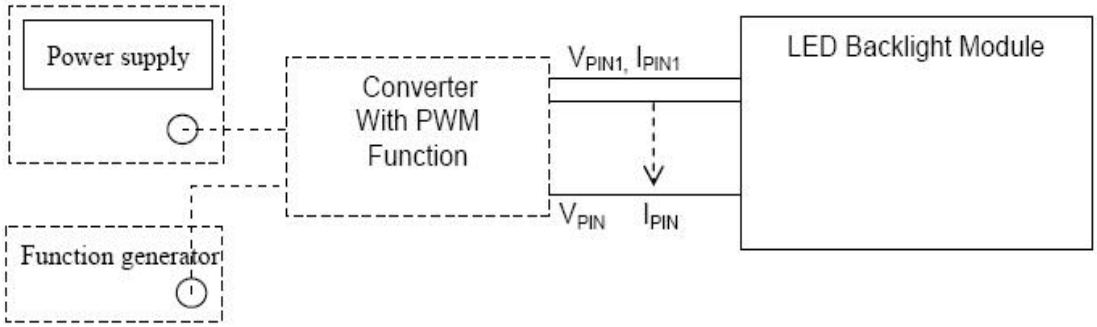
灯条串并定义及接口型号定义：Light bar Series and Parallel condition,interface type condition:

18 串 4 并 /18series 4 Parallel





NOTE 2:



13.2 光学规格

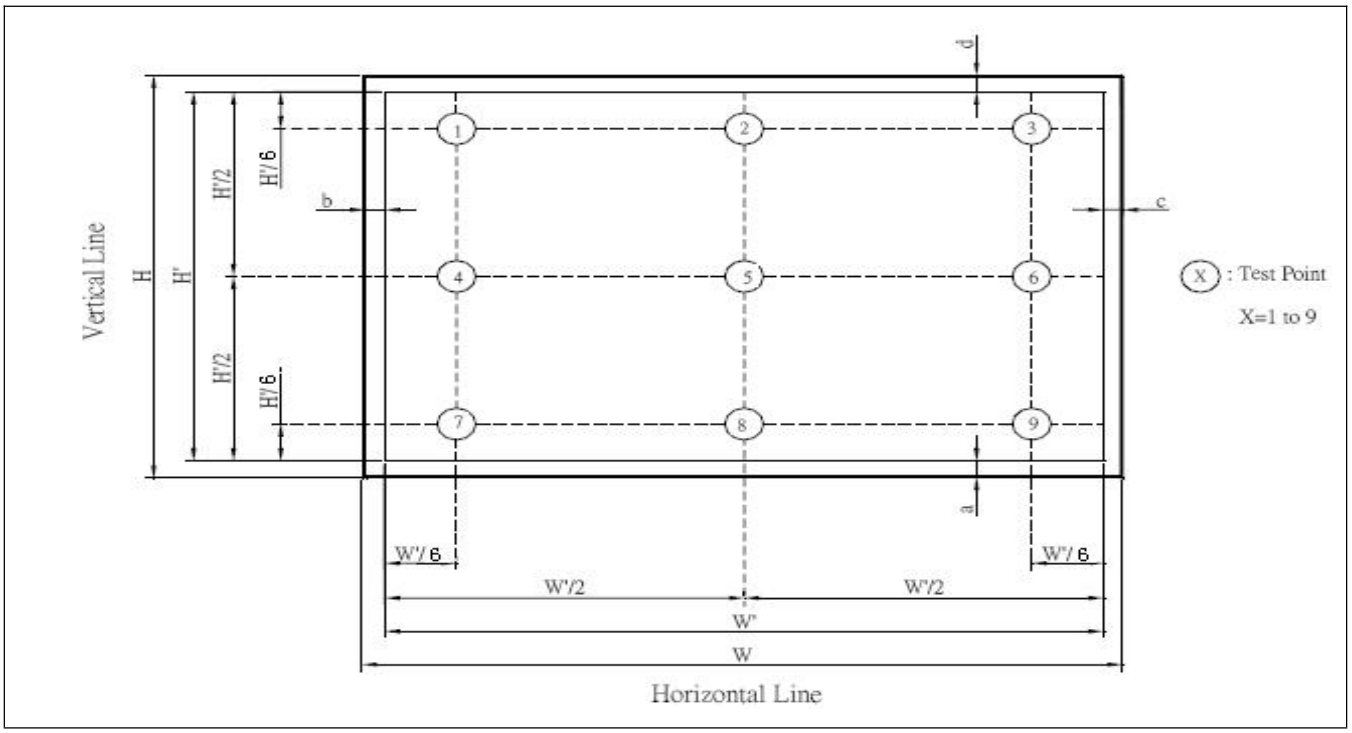
环境温度(Ta)＝25℃±2　　湿度 HR=65%±10

項目 Item	單位 unit	規　格 Spction			备注 Remark
		MIN	TYP	MAX	

1	模组亮度 BLU Brightness	Center point	cd/m²	500	550	---	Center point （NOTE 1）
	均匀性 Uniformity	9 点	%	72	75	---	（NOTE2）
2	模组色度 LCM CIE	x	---	-0.015	0.27	+0.015	Center point
		y	---	-0.015	0.26	+0.015	Center point

NOTE 1: 中心点为最亮点 The center brightness data ia the maximum

NOTE 2: 下图示中 9 点之最小数值点比中心点，均匀性定义：Minimum(1-9)/Maximum(5)
The figure bleow the minimum value of 9 point divided by the center ,
Luminous uniformity is defined: Minimum(1-9)/Maximum(5)



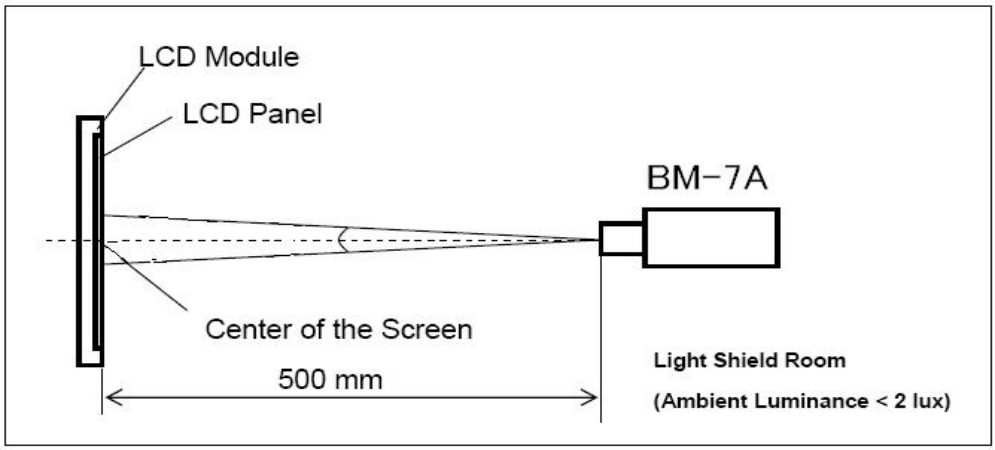
1. W: The length of BLU luminant area , H: The wide of BLU luminant area
2. W′ =W － b －c H′ = H － a － d

13.3 光学测试标准

4.3.1 辉度计：TOPCON-7A 视角:1° 辉度计与被测物体距离：500±50mm
TOPCON-7A Angle:1° Distance:500±50mm

4.3.2 测试条件：环境温度：25℃±2℃，湿度（HR）=65±10%，环境亮度≤2Lux,
点亮 20 分钟后测试

Test conditions: the ambient temperatue is 25℃±2℃,humidity 65±10%,the ambient brightness≤2Lux, 20 minutes after lighting.



14.1 背光检验规格

14.1.1 背光画面检验规格 BLU screen test specifications

序号	项目 Item	检验项目 Test project	规格 Specifications	判定 Determinant	检验工具 Inspection tools
1	背光 BLU	亮点，暗点，异物	D≤0.15	忽略 ignore	菲林卡尺 Film caliper (NOTE 1) (NOTE 2) (NOTE3)
			0.15<D≤0.5	n≤3, S≥5	
			D≥0.5	NOT allow	
		线状异物，划伤，刮伤	W≤0.1	忽略 ignore	
			0.1<W≤0.2 0.3≤L≤5	n≤3, S≥5	
			0.2<W, 0.3<L	NOT allow	
		亮暗不均 Mura	---	依限度样品 by limit sample	目视 eye
		水波纹 Ripple	---	依限度样品 by limit sample	目视 eye

14.1.2 外观检验

Appearance Inspection Specification

序号	项目 Item	检验项目 Test project	规格 Specifications	判定 Determinant	检验工具 Inspection tools
1	钣金	刮伤/压痕	W≤0.15	忽略 ignore	菲林卡尺

	BEZEL	Scratch/sunken	0.15＜W≤0.25 L≤20mm	n≤4	Film caliper
			0.15＜W≤0.25 20＜L≤50	n≤2	
		无感刮伤	----------	不计	目视 eye
		毛边 Rough edge	L＞0.1mm	Not allow	目视 eye
		氧化生锈 Oxidation and RUST	----------	Not allow 断面依限度样品	目视 eye
		脏污/油污 Dirty filth/greasy dirt	----------	Not allow	目视 eye
	线材 Wire	破裂 Broken	----------	Not allow	目视 eye
	连接器 connector	破裂/变形 Broken/Deformation	----------	Not allow	目视 eye
	胶带 Tape	偏移/浮起 Offset/Emerge	----------	Not allow	目视 eye
	标签 Lable	无 No Lable	----------	Not allow	目视 eye
		破损 Broken	----------	Not allow	目视 eye
		脏污 Dirt	能够识别 Can be read	OK	目视 eye
		不清晰 Not clear	能够识别 Can be read	OK	目视 eye
		内容错误 Mistake	---------	Not allow	目视 eye

Note 1:

目视距离：30±5cm ， 检查角度：上下±30 度，左右±45 度。

Inspection distance: 30±5cm ,

Inspection Angle: ±30 degress up and down the left ± 45 degress

Note 2:

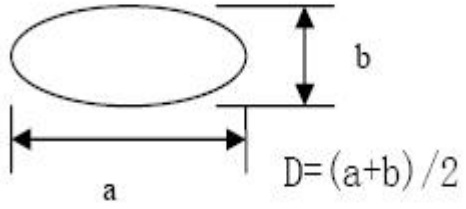
“S”定义：点与点之间的距离

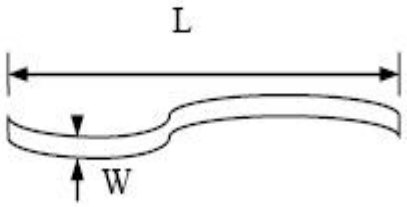
The “S” definition: The distance between the defect dot

Note 3:

a,b,D,W,L 的定义，具体如下：

The a,b,D,W,L definition, for the next:





15.0 可靠性测试项目及条件

Reliability Test Items and Conditions

项目 Item		测试条件 Test condition	判定基准
动作实验	高湿高湿 Operate at High Temperature and HUmidity	+45℃, 85%RH, 240Hrs	A,B,C,D,E,F
	高温 High temperature operation	Ta=60℃, 240Hrs	A,B,C,D,E
	低湿 Low temperature operation	0±2℃ 、240Hrs	A,B,C,D,E
	连续点灯	25±2℃, 65±10%RH/10000Hrs	A,B,C,D,E
	开/关灯 On/Off lighting	On(30sec)/Off(30sec)、10000 cycles	A,B,G
	冷热冲击 Thermal Shock	-20℃/30min-70℃/30min for a total 200 cycles,Start with cold temperature and end with high temperature	A,B,C,D,E,F
	高温 High temperature	60±2℃,240Hrs,	A,B,C,D,E
	低温 Low temperature	-20±2℃ 、240Hrs	A,B,C,D,E
振动实验	振动 Vibration Test	Sinusoidal Vibration level: 1.5G Bandwidth:10~300Hz Waveform: sine wave 30min for each direction X,Y,Z(1.5Hrs in total)	A,B

包装跌落实验 Packing drop test		0<W<= 10, 106cm; 10<W<=24, 91cm 24<W<=45, 76cm，1 角 3 棱 6 面	A,B
线材组	线材 Bending	导线折弯拉力 :0.6kgf±90°,10 次 ;0.6kgf ±180°，10 次	A,B
	端子 Pulling	静荷重：出现方向拉力维持 3kgf，1min	A,B
Connector 强度		抗拉力大于 1.5 kgf	A,B

NOTE 1:

测试后，须放置常温，常温 2 小时后测试

After testing,shall be placed at normal room temperature and Humidity after 2 huors for judgment

判定基准 ：

A. 点灯画面无异常
B. 外观无异党(损坏、破裂、刮伤、锈蚀、严重变形等情形)
C. 辉度值维持初始值 60%以上
D. 辉度均匀度变化率小于 30%
E. 色度变化 X,Y 小于 0.2
F. 不能结露
G. 辉度值维持初始值 50%以上

16.0 包装标示

Packing Marked

16.1 外箱出货条码（中性）

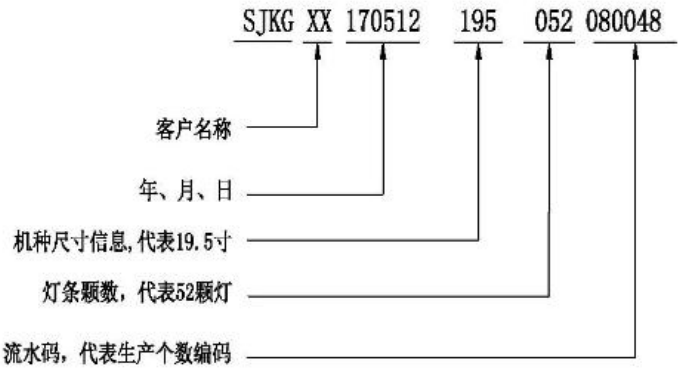
Shipping label outside the box

16.2 背光条码

BLU Barcode

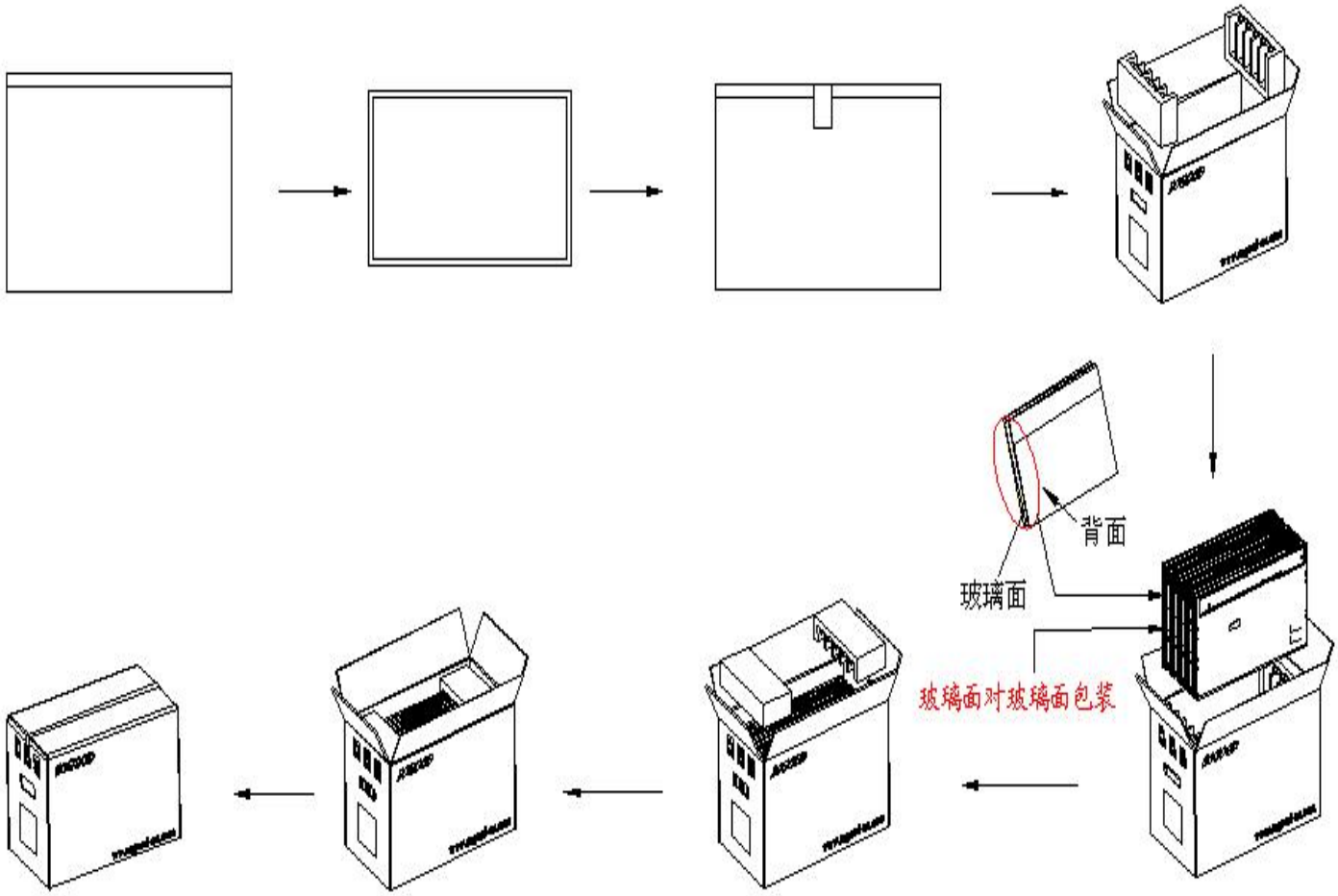
9.2.1 标签样式(BLU Used)

16.2.2 标签内容（BLU content）

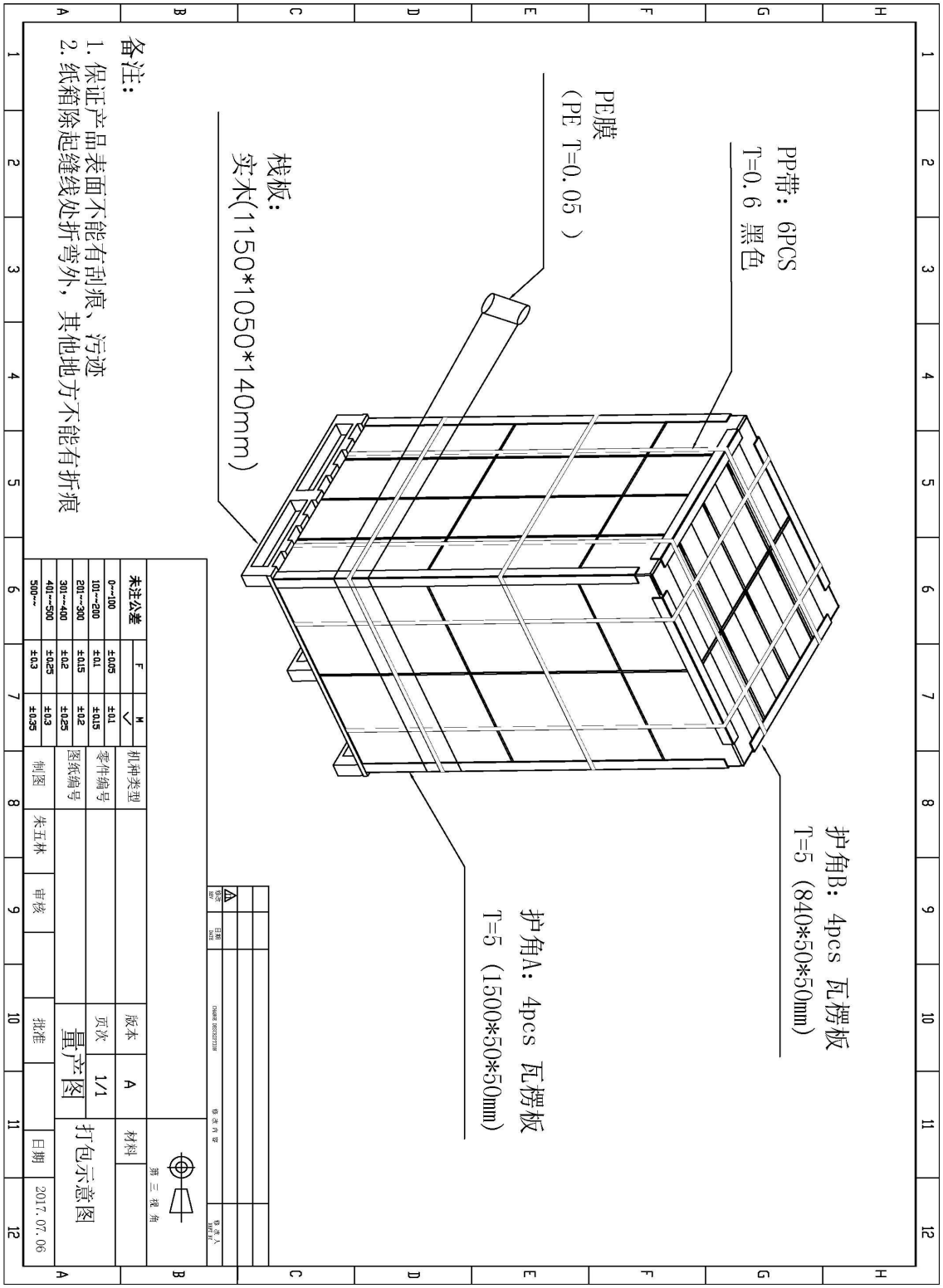


16.3 包装方式 Packing Method

9.3.1 背光包装方式 BLU packing



16.3.2 出货打包方式 Shipping packing



16.33 储存条件：

正常情况：温度：18℃～24℃；湿度：50%～70%RH

17. 注意事项 General Precautions

10.1.1 储存 Storage

1.模级需储存在暗室，并要求室温在 25±10℃，湿度在 65±10%RH，不能暴露在阳光下
Stor the module ina dark room where must keep at 25±10℃,65±10%RH,the module shall be exposed under strong light such as direct sunlight.

2.请不要将产品放置在有机溶剂中或是有腐蚀性气体的场合
Do not store the produce in surroundings containing organic solvent or corrosive gas

3. 应当把产品储存在防静电容器中或是防静电膜中
Store the module in an anti-electrostatic container or film .

10.1.2 操作 Handing

1. 请不要施加机械振动或是过大外力在模组上
Do not subject the module to mechanical shock or to excessive force On its surface
2. 禁止放置污染物在模组表面，不可使用裸露的手碰触产品。
To avoid contamination on the display surface,do not touch the module Surface with bare hands
3. Must be the correct way to connec the power cable,otherwise it will Cause damage

10.1.3 运输 transportation

1. 运输过程中严禁超高堆放挤压，倒放，整车装卸.
In transporting,Goods are strictly prohibited during the ultra-high stacking Extrusion,upside down,entire vehicle liading and unloading.
2. 防静电措施 Static Electricity
人体在接触产品时，应当以适当的方式接地
Persons who handle the module should be grounded through adequate methods.

17.2 其它 Other

1. 对本规格书，如有任何议疑，经双方协议后处理.
About this specification,if any question,go through both sides agreement Post-processing.
2. 任何变更都必须经过联络，并取得双方同意后主可变更，并针对变更内容记录管理.
Any changes must get into contant with each other,get tht agreement then To change ,and update the contents to record.
3. 版权属于 xxxxx 所有，禁止任何未经授权的使用.
The copyright belongs to shijikeguan .Any unauthorized use is prohibited.

18.0 背光模组成品图(Moudle Darwing)