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	SPECIFICATION	APPLICABLE GROUP LIQUID CRYSTAL DISPLAY GROUP

REVISION : 8-Feb-11

DEVICE SPECIFICATION FOR

TFT-LCD Module

MODEL No.

LQ043T3DW03

These parts have corresponded with the RoHS directive.

☐ CUSTOMER'S APPROVAL

BY _____

BY _____

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SHARP CORPORATION

RECORDS OF REVISION

LQ043T3DW03

SPEC No.	DATE	REVISED No	PAGE	SUMMARY	NOTE
LD-22604A	2010/6/21	A		-	
LD-22604B	2010/8/27	B	P7	7-1. Pixel Clock Timing chart "VIL" : from "0.1VCC" to 0.2VCC "VIH" : from "0.9VCC" to 0.8VCC.	
LD-22604C	2011/2/8	C	P17	Fig.1 Outline Dimension Add Dimension, Tolerance and Detail of FPC Terminal.	

– Contents –

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1. Application

This spec sheet applies to the color TFT-LCD module LQ043T3DW03.

2. Overview

This module is a color active matrix LCD module incorporating amorphous silicon TFT (Thin Film Transistor). It is composed of a color TFT-LCD panel, driver IC, control circuit(FPC), and a White-LED Backlight unit. Graphics and texts can be displayed on a 480×RGB×272dots panel with 16,777,216 colors by supplying 24bit data signal (8bit×RGB), four timing signals ,DC supply voltages for TFT-LCD panel driving and supply voltage for backlight.

LED drive circuit for backlight is not built in this module.

3. Mechanical Specifications

Parameter	technical literatures	Unit
Display size	11(4.3inch)Diagonal	cm
Active area	95.04(H)×53.86(V)	mm
Pixel format	480(H)×272(V) (1pixel=R+G+B dot)	pixel
Pixel pitch	0.198(H)×0.198(V)	mm
Pixel configuration	R,G,B horizontal stripe	
Display mode	Normally black	
Unit outline dimensions *1	105.5(W)×67.2(H)×7.7(D)	mm
Unit outline dimensions *2	105.5(W)×67.2(H)×6.1(D)	
Mass	85 (Max.)	g
Surface treatment	Anti-glare and hard-coating 3H	

【*1】 excluding FPC. 【*2】 excluding FPC and Spacer.

Outline dimensions are shown in Fig.1.

4. Input Terminals

4-1. TFT-LCD panel driving

CN1 Corresponding connectors : 04 6288 040 000 846+ (KYOCERA ELCO Co., Ltd.)

: 04 6275 040 000 829+ (KYOCERA ELCO Co., Ltd.)

[NOTE] Please do not use it besides corresponding connector.

Pin	Symbol	Function	Polarity	Remark
1	GND	Ground		
2	GND	Ground		
3	NC	Not Connected		
4	VCC	power supply (Digital)		
5	R0	RED data signal (LSB)		
6	R1	RED data signal		
7	R2	RED data signal		
8	R3	RED data signal		
9	R4	RED data signal		
10	R5	RED data signal		
11	R6	RED data signal		
12	R7	RED data signal (MSB)		
13	G0	GREEN data signal (LSB)		
14	G1	GREEN data signal		
15	G2	GREEN data signal		
16	G3	GREEN data signal		
17	G4	GREEN data signal		
18	G5	GREEN data signal		
19	G6	GREEN data signal		
20	G7	GREEN data signal (MSB)		
21	B0	BLUE data signal (LSB)		
22	B1	BLUE data signal		
23	B2	BLUE data signal		
24	B3	BLUE data signal		
25	B4	BLUE data signal		
26	B5	BLUE data signal		
27	B6	BLUE data signal		
28	B7	BLUE data signal (MSB)		
29	GND	Ground		
30	PCLK	Clock signal for sampling each data signal		
31	DISP	Sleep mode control		【*1】
32	Hsync	Horizontal synchronous signal	Negative	
33	Vsync	Vertical synchronous signal	Negative	
34	DE	Signal to settle the horizontal display position	Positive	【*2】
35	VDD	power supply (Analog)		
36	NC	Not Connected		
37	GND	Ground		
38	C1	Power supply for LED (Cathode 1)		
39	C2	Power supply for LED (Cathode 2)		
40	A	Power supply for LED (Anode)		

【*1】 Please refer to 7-3.

【*2】 The horizontal display start timing is settled in accordance with a rising timing of DE signal. In case DE is fixed "Low", the horizontal start timing is determined as described in 7-2. Do not keep DE "High" during operation.

5. Absolute Maximum Ratings

Parameter	Symbol	Condition	Pin	Ratings	Unit	Remark
Digital Supply voltage	Vcc	Ta=25℃	VCC	-0.3 ～ +4.0	V	【*1】
Analog Supply voltage	V_{DD}	Ta=25℃	VDD	-0.3 ～ +5.0	V	【*1】
Input voltage	V_I	Ta=25℃	【*2】	-0.3～+VCC+0.3	V	
VDD-VCC relation	-	Ta=25℃	-	VDD-VCC≧0	V	
Storage temperature	T_{STG}	—	-	-25 ～ +70	℃	【*1】
Operating temperature	T_{OPA}	—	-	-10 ～ +70	℃	【*1,3,4】

【*1】 Humidity：95%RH Max.(Ta≦40℃) Note static electricity.

Maximum wet-bulb temperature at 39℃ or less. (Ta>40℃) No condensation.

【*2】 R0～R7, G0～G7, B0～B7, Hsync , Vsync , DE , DISP , PCLK

【*3】 There is a possibility of causing deterioration in the irregularity and others of the screen and the display fineness though the liquid crystal module doesn't arrive at destruction when using it at 60～70℃.

【*4】 In the operating temperature item, the low temperature side is the ambient temperature regulations. The high temperature side is the panel surface temperature regulations.

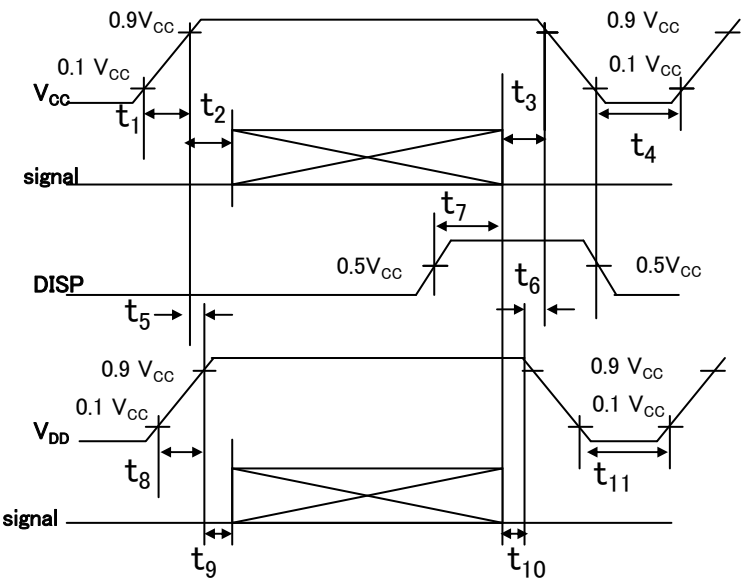
6. Electrical Characteristics

6-1. TFT-LCD panel driving

T_a＝+25℃

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Digital Power Supply	Supply voltage	V_{CC}		3.0	3.3	3.5	V	【*1】
	Current dissipation	I_{CC}	Vcc=3.3V	-	0.9	1.5	mA	【*2】
Analog Power Supply	Supply voltage	V_{DD}		3.0	3.3	3.5	V	【*1】
	Current dissipation	I_{DD}	VDD=3.3V	-	13	18	mA	【*2】
Permissive input ripple voltage		V_{RFVCC}		—	—	100	mVp-p	Vcc=3.3V
		V_{RFVDD}		—	—	100	mVp-p	VDD=3.3V
Logic input voltage		V_{IL}		0	—	0.2VCC	V	【*3】
		V_{IH}		0.8VCC	—	VCC	V	
Logic input reak current		I_{OL}		-1.0	—	1.0	μA	VI =0V【*3】
		I_{OH}		-1.0	—	1.0	μA	VI =+3.3V【*3】

【*1】 On-off conditions for supply voltage



$0 < t_1 \leqq 25ms$

$2ms < t_2 \leqq 10ms$

$2ms < t_3 \leqq 10ms$

$200ms < t_4$

$0ms < t_5 \leqq 5ms$

$1us \leqq t_6 \leqq 5ms$

$100ms < t_7$

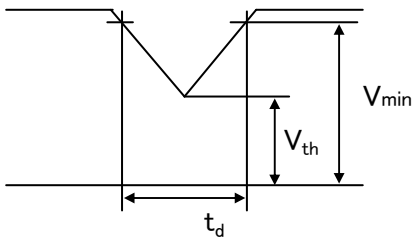
$0 < t_8 \leqq 25ms$

$1ms < t_9 \leqq 10ms$

$1ms < t_{10} \leqq 10ms$

$200ms < t_{11}$

Vcc-dip conditions



V_{CC}

V_{th} = 1.5V

V_{min} = 3.0V

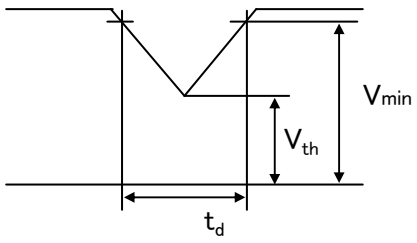
- $Vth < V_{CC} \leqq Vmin$

  $t_d \leqq 10ms$

- $V_{CC} < V_{th}$

  Vcc-dip conditions should also follow the On-off conditions for supply voltage

VDD-dip conditions



V_{DD}

V_{th} = 2.5V

V_{min} = 3.0V

【*2】 Typical Current Situation :All White Pattern （ Vcc=+3.3V、VDD=+3.3V、fck = 8.54MHz、Ta=25℃）

【*3】 R0～R7, G0～G7, B0～B7, Hsync , Vsync , DE , DISP , PCLK

6-2. Backlight Driving

The backlight system is edge-lighting type with white-LED.

The characteristics of LED are shown in the following table.

Ta＝+25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
LED Voltage	VL	-	24.5	27.2	V	【*1】
LED Current Range	IL	-	45	60	mA	【*2】
Number of Circuit channe	-	-	1.0	-		
LED Power Consumption	PL	-	1.2	-	W	
Life time	LL	-	(50000) (Module)	-	h	【Reference】 【*3】

【*1】The LED backlight is composed of 1 channel which 8 LED is connected in series.

【*2】Calculated value for reference (I L × VL × 1 channel)

【*3】①Lighting condition:

・The state of the LCD module installation: Landscape position and standing position

・Atmosphere temperature: 50℃

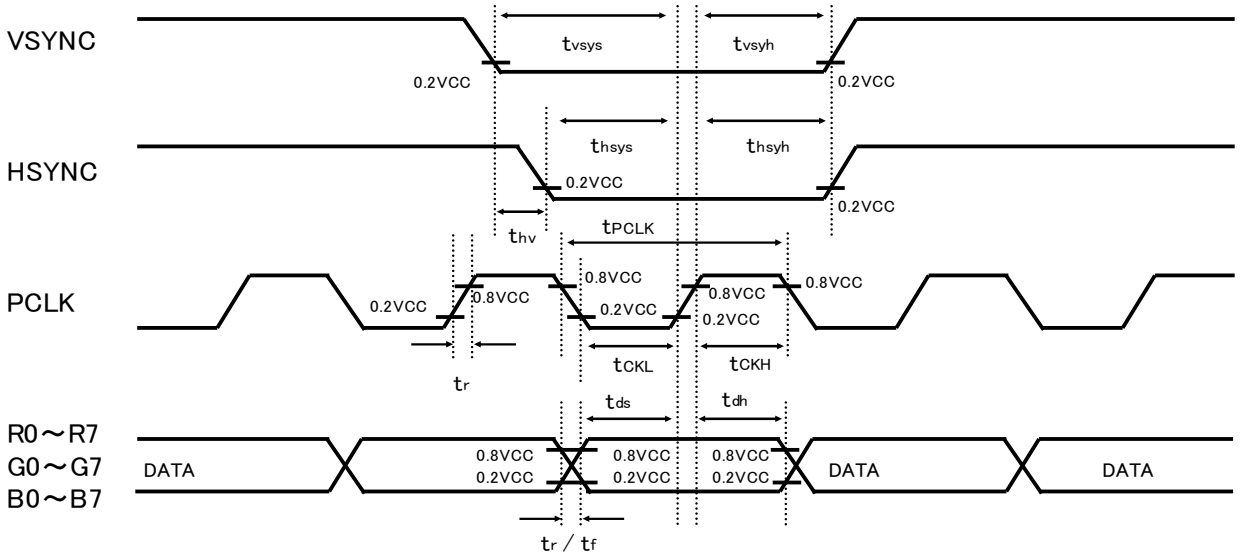
・Lighting current: 45mA (Constant current drive／Continuous turning on)

②Definition of Life time:

Luminance becomes 50% of an initial value. (under condition ①)

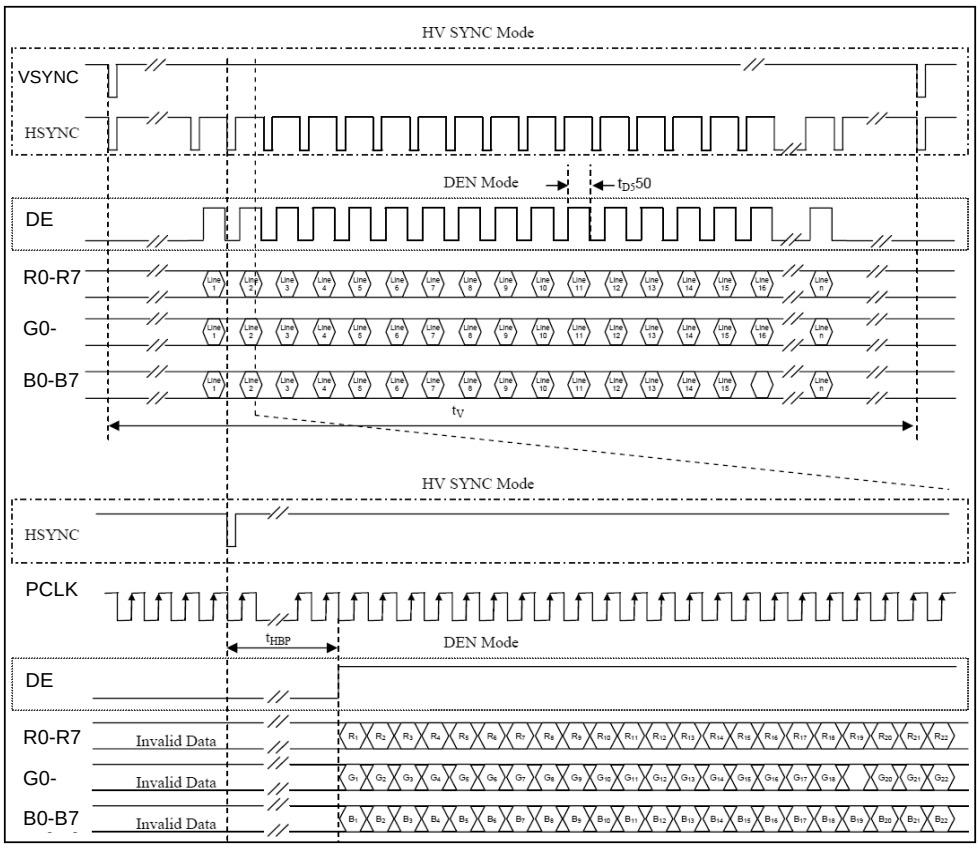
7. Timing characteristics of input signals

7-1. Pixel Clock Timing



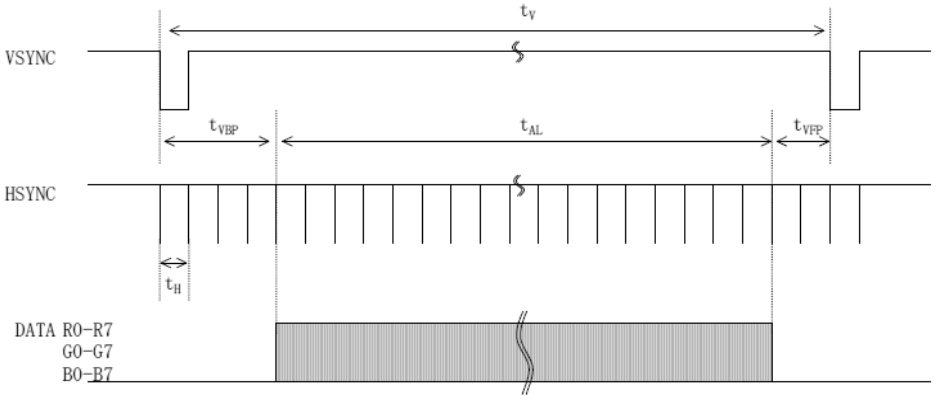
Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
PCLK Frequency	fPCLK	8.0	–	9.0	MHz	
PCLK Period	tPCLK	115	–	–	nSec	
Pixel Clock Period	tPIXCLK	–	1.0	–	tPCLK	
Pixel Clock Frequency	fPIXCLK	–	–	9.0	MHz	
Vertical Sync Setup Time	tvsys	5	–	–	nSec	
Vertical Sync Hold Time	tvsyh	5	–	–	nSec	
Horizontal Sync Setup Time	thsys	5	–	–	nSec	
Horizontal Sync Hold Time	thsyh	5	–	–	nSec	
Phase difference of Sync Signal Falling Edge	thv	0	–	480	tPCLK	
PCLK Low Period	tCKL	18	–	–	nSec	
PCLK High Period	tCKH	18	–	–	nSec	
Data Setup Time	tds	10.0	–	–	nSec	
Data Hold Time	tdh	15	–	–	nSec	
Rise / Fall Time	tr / tf	5	–	25	nSec	

7-2. 24-bit RGB Interface Timing Diagram & Transaction Example



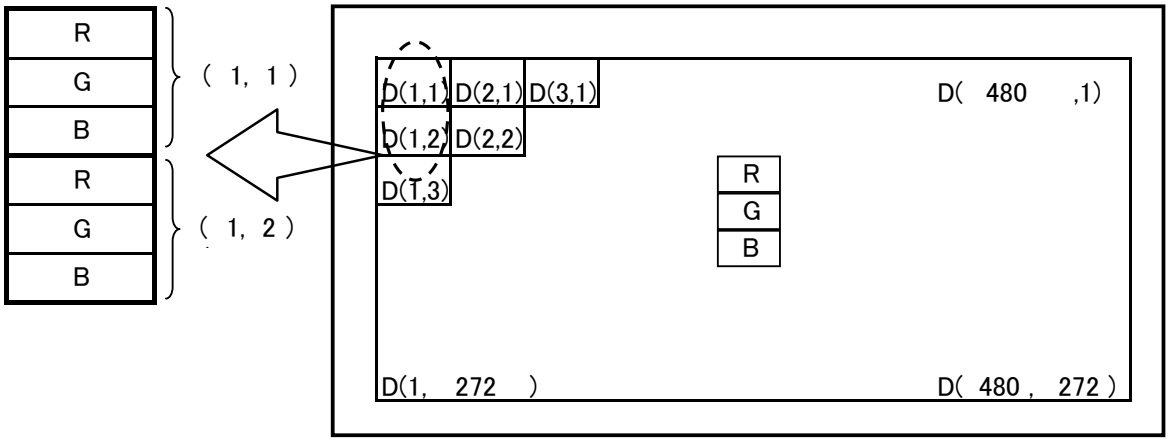
HV SYNC Mode

Characteristics		Symbol	min	typ	max	Units	Remark
Serial Clock Frequency		$1/t_{PCLK}$	8.0	8.54	9.0	MHz	
Horizontal	One Line Period	t_H	500	512	-	tPCLK	
	Active Data Period	t_{data}	480	480	480	tPCLK	Fix
	Horizontal Back Porch	t_{HBP}	16	16	16	tPCLK	Fix
	Horizontal Front Porch	t_{vsys}	4	16	-	tPCLK	
Vertical	One Field Period	t_V	278	278	278	tH	Fix
	Active Line Period	t_{AL}	272	272	272	tH	
	Vertical Back Porch	t_{VBP}	4	4	4	tH	
	Vertical Front Porch	t_{VFP}	2	2	2	tH	



【＊】In case of using the long vertical period, the deterioration of display quality, flicker etc. may occur.

7-3. Input Data Signals and Display Position on the screen



8. Input Signals, Basic Display Colors and Gray Scale of Each Color

	Colors & Gray scale	Data signal																							
		Gray Scale	R0	R1	R2	R3	R4	R5	R6	R7	G0	G1	G2	G3	G4	G5	G6	G7	B0	B1	B2	B3	B4	B5	B6	B7
Basic Color	Black	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Blue	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	Green	—	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	Cyan	—	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Red	—	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Magenta	—	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	Yellow	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	White	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gray Scale of Red	Black	GS0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↑	GS1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Darker	GS2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↑ ↓	↑ ↓					↑ ↓								↑ ↓								↑ ↓			
	Brighter	GS253	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↓	GS254	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red	GS255	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gray Scale of Green	Black	GS0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↑	GS1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Darker	GS2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↑ ↓	↑ ↓					↑ ↓								↑ ↓								↑ ↓			
	Brighter	GS253	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	↓	GS254	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	Green	GS255	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Gray Scale of Blue	Black	GS0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↑	GS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Darker	GS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	↑ ↓	↑ ↓					↑ ↓								↑ ↓								↑ ↓			
	Brighter	GS253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1
	↓	GS254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	Blue	GS255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

0 :Low level voltage　1 :High level voltage　X :Don't care

Each basic color can be displayed in256 gray scales from 8 bit data signals. According to the combination of、total 24 bit data signals, the 16,777,216-color display can be achieved on the screen.

9. Optical Characteristics

Ta=+25℃, Vcc=＋3.3V

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Viewing angle range	Horizontal	θ 3, θ 9	CR>10	70	80	－	Deg.	【*1,2,4】
	Vertical	θ 6, θ 12		70	80	－	Deg.	
Contrast ratio		CR	optimized angle	400	800	－		【*2,4】
Response Time	Risw	τ r	θ =0°	－	30	－	ms	【*3,4】
	Decay	τ d		－	30	－	ms	【*3,4】
Chromaticity of White		Wx		0.270	0.320	0.370		【*4】
		Wy		0.308	0.358	0.408		
Luminance of white		Y_{L1}		280	400	－	cd/m^2	【*4】

※The measurement shall be executed 30 minutes after lighting at rating.(condition:I_L＝45mA)

The optical characteristics shall be measured in a dark room or equivalent state with the method shown in Fig.2 below.

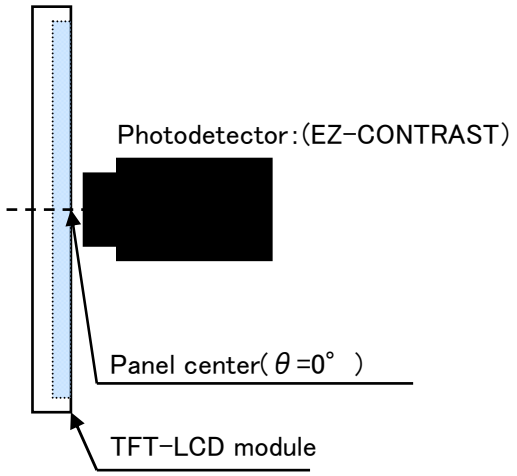


fig.2-1 Measuring method of Viewing angle range.

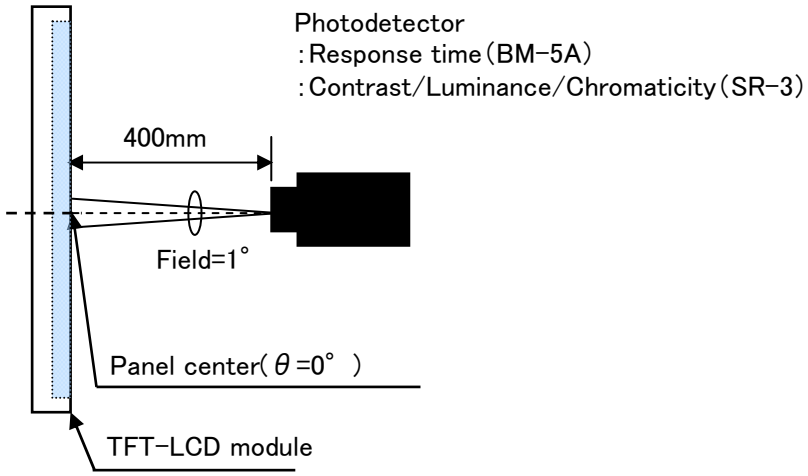
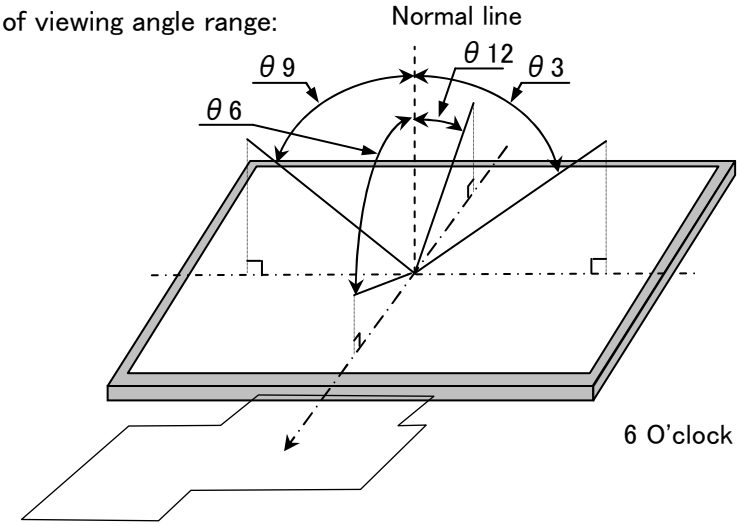


fig.2-2 Measuring method of contrast, luminance, response time, and Chromaticity.

Fig.2 Optical characteristics measurement method

【*1】Definitions of viewing angle range:

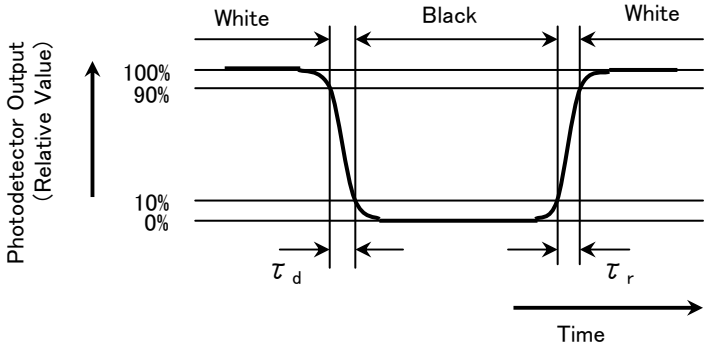


【*2】Definition of contrast ratio:

The contrast ratio is defined as the following. Contrast (CR) = $\frac{\text{Luminance with all pixels white}}{\text{Luminance with all pixels black}}$

【*3】Definition of response time:

The response time is defined as the following figure and shall be measured by switching the input signal for "black" and "white".



【*4】This shall be measured at center of the screen.

10. Handling Precautions

a) Be sure to turn off the power supply when inserting or disconnecting the FPC.
b) Please insert FPC in the connector carefully so that the tension should not hang.
c) Be sure to design the cabinet so that the module can be installed without any extra stress such as warp or twist.
d) Since the front polarizer is easily damaged, pay attention not to scratch it.
Blow away dust on the polarizer with antistatic N_2 blow. It is undesirable to wipe off because a polarizer is sensitive.
It is recommended to peel off softly using the adhesive tape when soil or finger oil is stuck to the polarizer.
When unavoidable, wipe off carefully with a cloth for wiping lenses.
e) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
f) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
g) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface. Handle with care.
h) Since CMOS LSI is used in this module, take care of static electricity and injure the human earth when handling.Observe all other precautionary requirements in handling components.
i) Since there is a circuit FPC in the module back, stress is not added at the time of a design assembly.
Please make it like. If stress is added, there is a possibility that circuit parts may be damaged.
j) LCD-FPC has electronic devices on its own. Please make sure electric insulation between that portion (the devices and soldering) and the user' s set.
k) The polarizer surface on the panel is treated with Anti-Glare for low reflection. In case of attaching protective board over the LCD, be careful about the optical interface fringe etc. which degrades display quality.
l) Do not expose the LCD panel to direct sunlight. Lightproof shade etc. should be attached when LCD panel is used under such environment. The panel characteristic might be deteriorated and the display fineness decrease when strong light is irradiated to the liquid crystal panel.
m) When handling LCD modules and assembling them into cabinets, that long-terms storage in the environment of oxidization or deoxidization gas and the use of such materials as reagent, solvent, adhesive, resin, etc. which generate these gasses, causes corrosion and discoloration of the modules.
Therefore, please avoid these use.
Epoxy resin (amine series curing agent), silicone adhesive material (dealcoholization series and oxime series), tray forming agent (azo compound) etc, in the cabinet or the packing materials may induce abnormal display with polarizer film deterioration regardress of contact or noncontact to polarizer film.
Be sure to confirm the component of them.
n) Liquid crystal contained in the panel may leak if the LCD is broken. Rinse it as soon as possible if it gets inside your eye or mouth by mistake.
o) Notice:Never dismantle the module , because it will cause failure. Moreover, please do not peel off the tapes other than the creped paper tape (yellow tape) of a protection film pasted to the product.
p) Be careful when using it for long time with fixed pattern display as it may cause afterimage.
(Please use a screen saver etc., in order to avoid an afterimage.)
q) If a minute particle enters in the module and adheres to an optical material, it may cause display non-uniformity issue,etc
Therefore, fine-pitch filters have to be installed to cooling and inhalation hole if you intend to install a fan.
r) The LED used for this product is very sensitive to the temperature. Luminance decreases rapidly when it issued for a long time under the environment of the high temperature. Please consult our company when it is used under the environment like the above mentioned.
s) Please make the LED lighting power supply an independent fixed current drive composition in each channel.
When each channel of LED is driven parallel, the display fineness and longevity might be deteriorated.
for a long time under the environment of the high temperature. Please consult our company when it is used under the environment like the above mentioned.
t) Don't give any stress to the joint part of FPC and LCD panel , please avoid the bend to panel side.

11. Packing form

a) Piling number of cartons : MAX. 8

b) Package quantity in one carton: 80pcs

c) Carton size(TYP): 580mm(W) × 365mm(D)×235mm(H)

d) Total mass of one carton filled with full modules(80pcs): 9kg

e) Packing form fig: fig3

12. Reliability test items

No.	Test item	Conditions	Remark
1	High temperature storage test	Ambient temperature 70℃ 240H	【Note1】
2	Low temperature strage test	Ambient temperature -25℃ 240H	【Note1】
3	High temperature & high humidity operation test	Ambient temperature 40℃、Humidity 95% RH 240H (No condensation.)	【Note1】
4	High temperature operation test	Panel surface 70℃ 240H	【Note1】
5	Low temperature operation test	Ambient temperature -10℃ 240H	【Note1】
6	Vibration test	＜Sin wave＞ Frequency :10～57Hz／Vibration width (one side) :0.076mm :57～500Hz／Gravity:9.8m/s2 Sweep time:11minutes Test period :3H(X, Y, Z direction 1H)	【Note1】
7	Shock test	Max. gravity:490m/s2 Pulse width:11ms Direction:±X,±Y,±Z Test period :1time／1direction	【Note1】

【Note1】 Under the display quality test conditions with normal operation state, these shall be no change which may affect practical display function. (normal operation state:Temperature:15～35℃, Humidity:45～75%, Atmospheric pressure:86～106kpa)

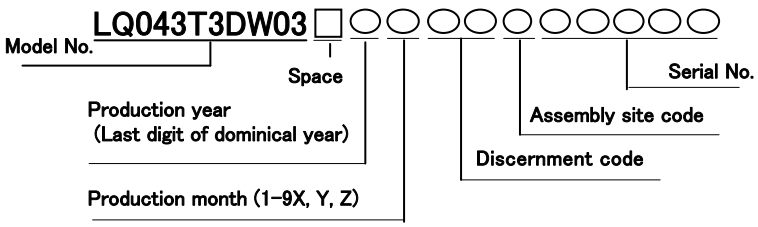
13. Others

13-1. Lot No Label:

A) Module serial label

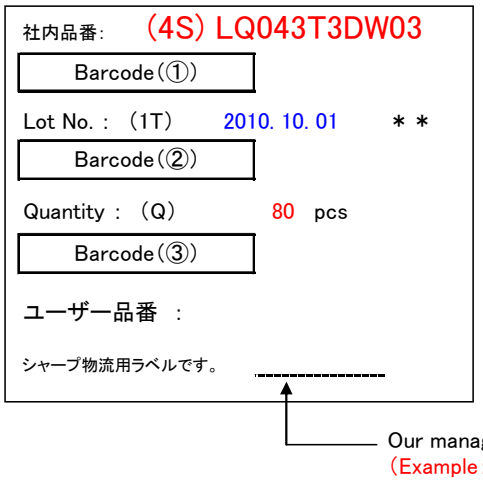
The label that displays Model No.(LQ043T3DW03)・Lot No. is stuck on the back of the module.

Lot No display method(Figure and alphabet)



B) Packing box Label:

The label that displays ①Model number(LQ043T3DW03) ②Lot number ③Quantity of module is stuck on the packing box. Moreover, the display of bar code also applies to this.



Our management product number might be filled
(Example: LQ043T3DW03A etc.)

① Model number(LQ043T3DW03)

② Lot number (DATA)

③ Quantity of module

A right picture is written to the packing box of module for the RoHS restriction.

※R.C.(RoHs Compliance)means these parts have corresponded with the RoHs directive.

This module corresponds from the first sample to RoHS Directive.

R.C.

13-3. The ozone-depleting substances is not used.

13-4. If any problem occurs in relation to the description of this spec sheet, it shall be resolved through discussion with spirit of cooperation.

14. Storage conditions

Environmental condition range of storage temperature and humidity

Temperature 0 to 40 degrees Celsius

Relative humidity 95% and below

【Note】Please refer below as a mean value of the environmental conditions.

Summer time temperature 20 to 35 degrees Celsius humidity , 85% and below

Winter time temperature 5 to 15 degrees Celsius humidity , 85% and below

Please maintain within 240 hours of accumulated length of storage time, with conditions of 40 degrees Celsius and room humidity of 95%.

Direct sunshine

Please keep it in the state of wrapping or the darkroom so that direct sunshine should not strike directly into the product.

Atmosphere

Please do not keep it in the place with the danger of the generation of the causticity gas and the volatile solvent.

Asking for be dewy prevention

・Please do not put directly on the floor, and keep the wrapping box on the palette or the stand to avoid the be dewy. Moreover, please arrange it in a constant direction correctly to improve ventilation under the palette.

・Please separate from the wall in the storage warehouse and keep it.

・Please note that ventilation is improved and consider the installation such as ventilators in the warehouse.

・Please manage so that there is no rapid temperature change more than natural environment.

Keeping period

Please make it to keeping within one year under the above-mentioned keeping condition.

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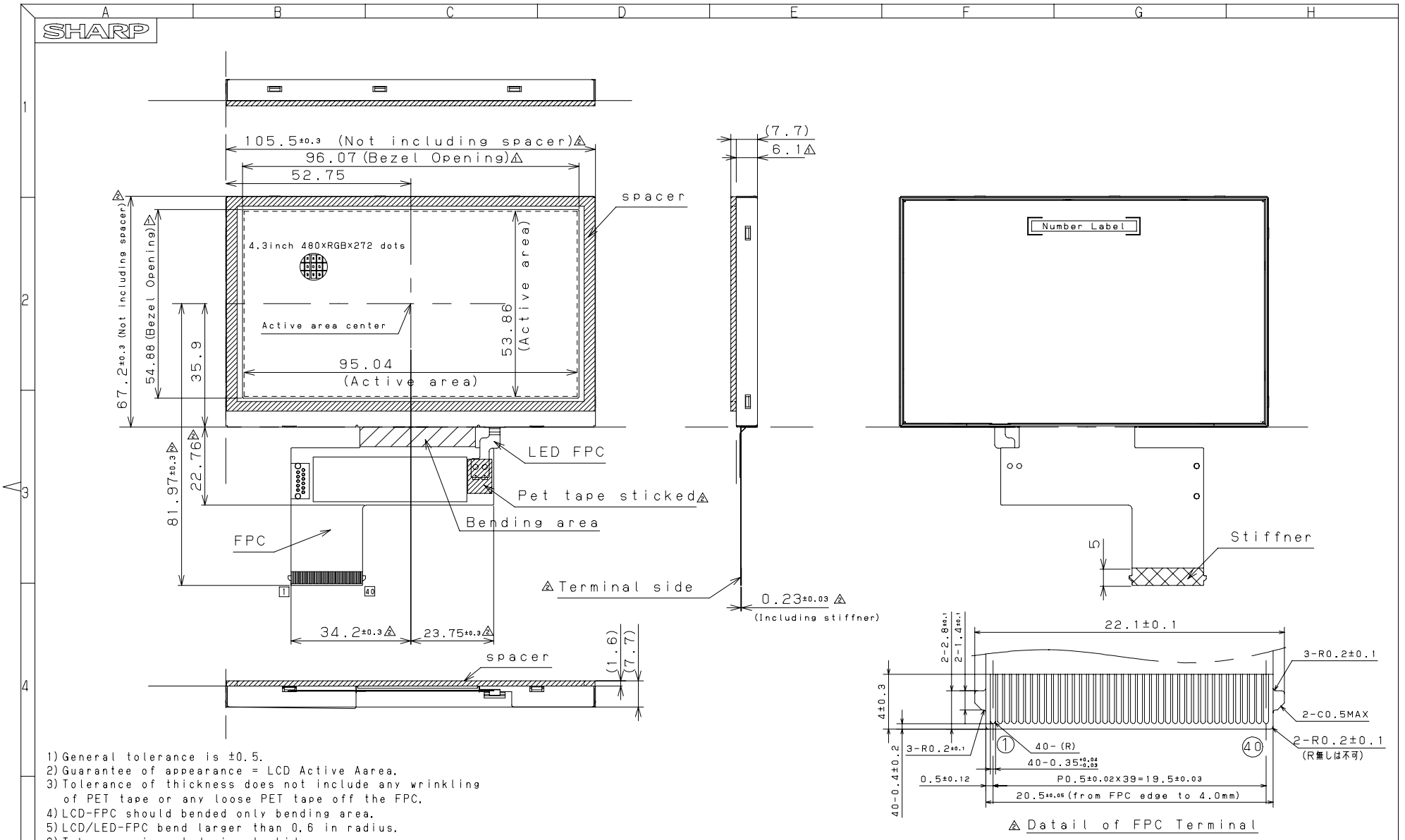

1) General tolerance is ±0.5.
2) Guarantee of appearance = LCD Active Aarea.
3) Tolerance of thickness does not include any wrinkling of PET tape or any loose PET tape off the FPC.
4) LCD-FPC should bended only bending area.
5) LCD/LED-FPC bend larger than 0.6 in radius.
6) Take care in set design to hide the scratches and bubbles appeared on the polarizer or other frame area which is located outside of guarantee area.
7) The light of Back Light is leaking from BM outside, please light shielding by the set.
8) The tolerance of module width are exclude warp of case.

unit:mm	Please do not copy this material and do not disclose this to third party		
DATE	2009.12.10	SCALE	1/1
MODEL	LQ043T3DW03		
DRAWING NO		size	A3

No.	DATE	REVISION
△	2011.2.8	Add Dimension, Tolerance and Detail of FPC Terminal.
△	2010.3.24	Dimension changed(Module thickness & Bezel opening)

ENGINEERING DEPARTMENT
MOBILE LIQUID CRYSTAL DIVISION Ⅱ, MOBILE LIQUID CRYSTAL DISPLAY GROUP

LC-22604C-17

Fig.1 LQ043T3DW03 OUTLINE DIMENSIONS

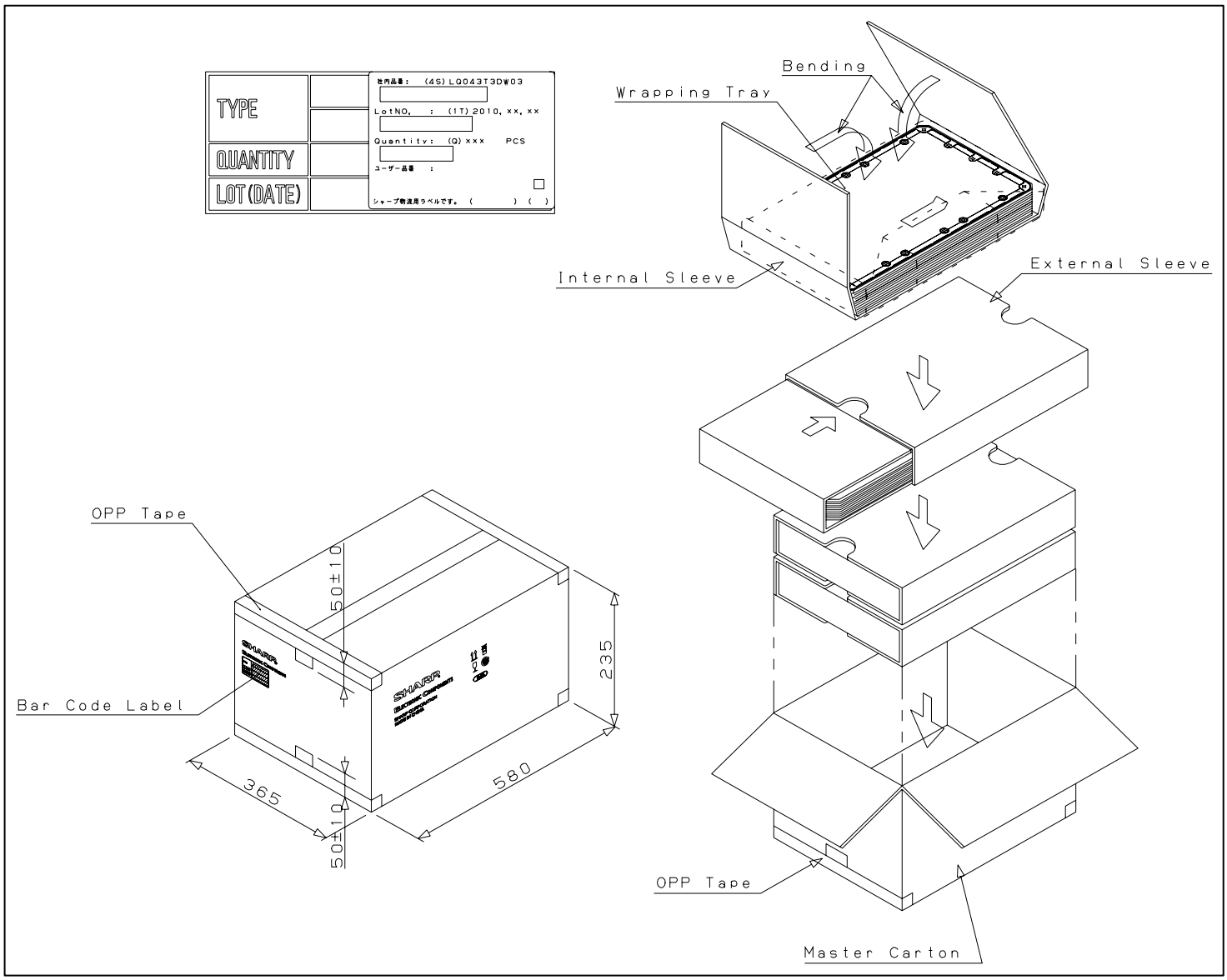

Fig3 : Packing form figure