



Revision History

[illegible]

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1.Contants

This standard is for projected capacitive type touch panel that can be one module of LCD

2.General Standard Specification

Item	Specification	
Structure (not including liner)	Cover Glass	1.8 mm
	TOP OCA	0.1 mm
	TOP ITO Film	0.1 mm
	MID OCA	0.1 mm
	BOT ITO Film	0.1 mm
	Total thickness	2.2±0.2mm
Operating Temperature Range	-20℃ ~+70℃ ,20%RH ~85%RH (Except for dew gathering.)	
Storage Temperature Range	-30℃ ~+80℃ ,20%RH ~90%RH (Except for dew gathering.)	
Light Transparency	85%min	
Package Drop	No damage to the product.(1corner edge, 2 ridges, 4 surfaces, drop from 50 cm height)	
Controller FW	PCAP32_1024_v00_test1a_C000_YFO 17_H8539A_Inverse_Naked TP_UR	

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3. Optical Characteristic.

(3-1) test by light measure device and the result should be 85% min.

4. Electrical characteristics

TBD

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5. Reliability Test (Non operating.)

(5-1) High Temperature Test.

The requirements in 3 and 4 shall be satisfied after exposing at 80°C for 240 hours and at normal temperature and humidity for 24 hours.

(5-2) Low Temperature Test.

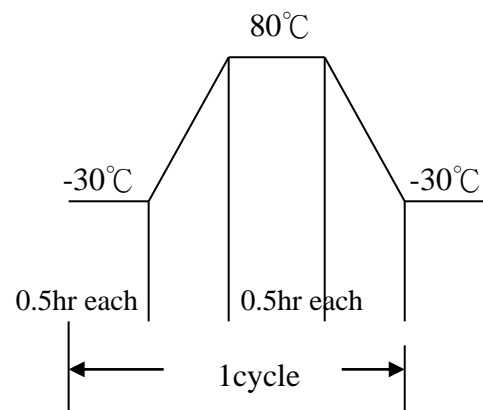
The requirements in 3 and 4, shall be satisfied after exposing at -30°C for 240 hours and at normal temperature and humidity for 24 hours.

(5-3) High Temperature 、 High Humidity Test.

The requirements in 3 and 4, shall be satisfied after exposing at 60°C, 90%RH for 240 hours (after dehumidifying in the chamber 40°C and 50% max.) and at normal temperature and humidity for 24 hours.

(5-4) Thermal Shock Test.

The requirements in 3 and 4, shall be satisfied after exposing under the conditions between -30°C (0.5hr each) and 80°C (0.5hr each) by 50 cycles (taking out at 80°C) and at normal temperature and humidity for 24 hours.



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6. Appearance Inspection Standard

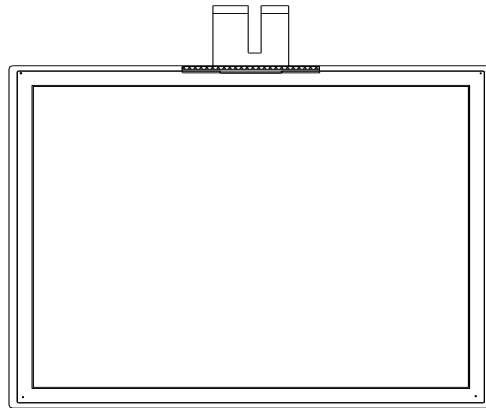
Unveil product appearance inspection standard and to assurance product quality Level.

(6-1).Scope :

TOUCH PANEL View area.

(6-2). Inspection Area(Inspection on front side only):

Appearance inspection of View area(VA) and black printing area are define at 6-5.

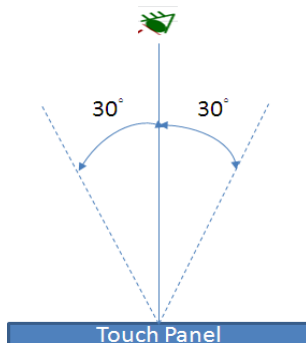


(6-3). Limit Sample:

If the definition of appearance inspection is out off the description mentioned in this specification, we will base on the both parties agreed limit sample. Both parties will have the same standard limit sample and the appearance definition will be based on the limit sample priority

(6-4). Inspection Conditions:

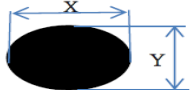

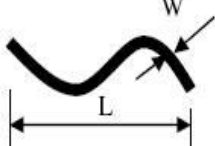
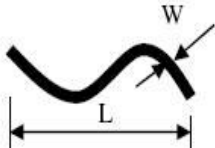
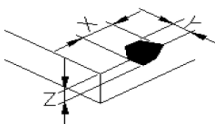
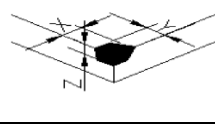
- 檢測環境：700±300LUX (standard 500Lux.)
- 檢驗距離：35cm±5 cm
- 不可接受的缺陷：Ac=0, Re=1(for IC firmware error)
- 缺陷：AQL=1.0
- 檢驗角度：30°(如圖示)
- 檢驗秒數：15sec



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(6-5) Criteria

Based on above inspection condition, the defect can be found within 3 to 5 second is major defect.

項目	檢驗標準	備註
點狀(同色點，異色點，晶點，亮點)	1. $D \leq 0.6\text{mm}$ Ignore 2. $0.6\text{mm} < D \leq 0.9\text{mm}, DS \geq 5\text{mm}, N \leq 6$ 3. $D > 0.9\text{mm}$ NG	$D = (X+Y)/2$ 
凹凸點	1. $D \leq 3\text{mm}$ or 依限樣 2. $D > 3\text{mm}$ NG	$D = (X+Y)/2$ 
划痕/刮傷	1. $W \leq 0.2\text{mm}$ Ignore 2. $0.2\text{mm} < W \leq 0.3\text{mm}, L \leq 20\text{mm}, DS \geq 5\text{mm} N \leq 7$ 3. $0.3\text{mm} < W \leq 0.4\text{mm}, L \leq 20\text{mm}, DS \geq 5\text{mm} N \leq 5$ 4. $W > 0.4\text{mm}$ NG	
纤维/毛屑	1. $W \leq 0.2\text{mm}$ Ignore 2. $0.2\text{mm} < W \leq 0.3\text{mm}, L \leq 20\text{mm}, DS \geq 5\text{mm} N \leq 7$ 3. $0.3\text{mm} < W \leq 0.4\text{mm}, L \leq 20\text{mm}, DS \geq 5\text{mm} N \leq 5$ 4. $W > 0.4\text{mm}$ NG	
崩邊	1. $y \leq 0.6\text{mm}$, $z \leq 1/2T$, ignore z : Chip depth : $\leq T$ ($N \leq 7$) y : Chip width : $y \leq 1/2T$ ($N \leq 7$) x : Chip length : $x \leq 1/2T$ ($N \leq 7$)	
缺角	1. $y \leq 0.6\text{mm}$, $z \leq 1/2T$, ignore z : Chip depth : $\leq T$ ($N \leq 7$) y : Chip width : $y \leq 1/2T$ ($N \leq 7$) x : Chip length : $x \leq 1/2T$ ($N \leq 7$)	
髒污	可清除的髒污可忽略	

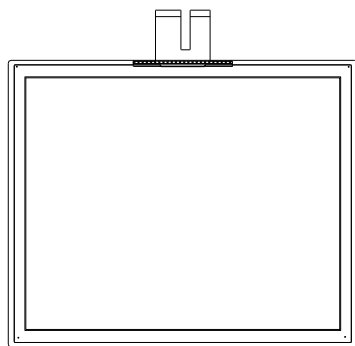
N	数目	D	直径 (mm)
L	长度 (mm)	H	深度 (mm)
W	宽度 (mm)	DS	距离 (mm)
S	面积 (mm ²)		

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7. Package

(7-1) The touch panel should be cover by protect film both sides before put into box.

(7-2) The Lot No. will be printed on the glass during the Silver Pattern Printing Process for future tracing. Please see attached drawing.



H8539D-XX-SXXXXXX-XXX

Lot No.

DD:Date

MM:Month

YY:Year(A.D)

P:Product S:Sample

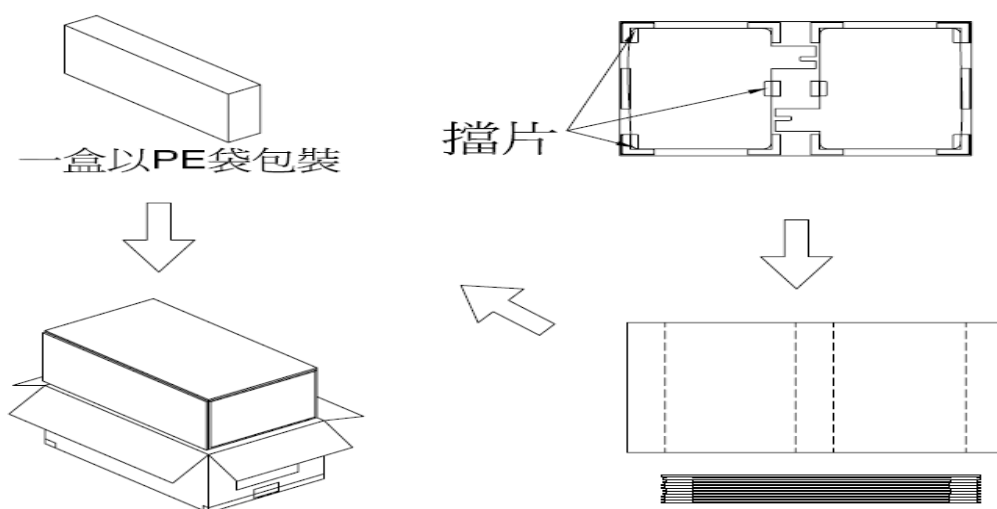
Serial No.

Item No.

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(7-3)Package

Using paper box to package, inside of box using PP tray.



(7-4)Transportation

Can not transport the product under the environment that may destroy the quality of product, such as, high humidity, extraordinarily high or low temperature.

8.Others.

- (8-1) Any question about this standard should discuss each other and answer it.
- (8-2) Any change of this standard should be approved by both parties. It can not be changed if not approved.
- (8-3) If having difference between general standard and specific standard, we adopt specific standard.
- (8-4) Providing one year warranty under the shelf life condition which meets the standard procedure and electrical properties. Ref.(8-5).
- (8-5) This product should keep in the condition 10~69% RH, temperature between 10~35℃, away the sunlight directly. Please avoid prolonged exposure to sunlight Avoid the heavy material stack above to prevent the ITO film distortion.
- (8-6) Please put the carton down gently and prevent dropping the carton.
- (8-7) The validity of this specification
 - a) This document would be considered as a temporary specification.
 - b) This document is considered as an official specification, when this file was sent for one month without debate or signed.

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9.Return:

- (9-1) If received unsatisfied product, please contact with us within one month. If you would like to return the product, please keep the product in the original status. And send it back only touch panel itself.
- (9-2) Product specification assures only the quality of touch panel itself.
- (9-3) After carefully read product specification, please stamp with agree mark, and send it back to our sales department. Two months after production been issued, and sent out to you, if we still not get any response from you. We will assume that you understand and accept all contents of production specification.
- (9-4) YFO do not accept any RMA after FPC assembly process or front lens/cover/window lamination process by Customer.
- (9-5) YFO does not accept any RMA which have been shipped over 1 month.

