

PRODUCT SPECIFICATION

Customer (客户名称) : _____

Customer No. (客户编码) : _____

Product (产品类型) : Capacitive Touch Panel

Product No. (产品编号) : UT-CT028005 总成

Date (日期) : 2018-12-26

Shenzhen Beauty Photoelectric Technology Co.,Ltd		
APPROVED (批准)	CHECKED (审核)	PREPARED (编写)
		LEE

Customer Approval: 客户批准	(1) Accept 接收 (2) Reject 拒绝 Comment 意见: Approved by 确认人: _____
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History of version 变更记录

Date 日期	Ver. 版次	Description 描述	Page 页码	Design by 变
2018-12-26	A0	Initial Release 首次发行	-	LEE
Remarks 备注 :				

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1. General Specification 产品规格

Item 项目	CONTENTS 内容	Unit 单位
Outline Dimension 外形尺寸	76.1(L) * 52.5(W) *1.1 (H)	mm
Active Area(W*L)动作区	--	mm
View Area 可视区	57.6*43.2	mm
TP size (inch) 英寸尺寸	2.8	inch
Interface Type 接口种类	IIC	-
Operation Temperature 工作温度	TOPL = -20, TOPH =70	℃
Storage Temperature 储存温度	TSTL = -30, TSTH =80	℃
CL thickness 钢化玻璃厚度	T=1.1 基材 (弧面 2.5D)	mm
Resolution 解析度	240*320	
Input force 输入外力	<10g	
Surface hardness 表面硬度	>6H	

2. Electrical Characteristics (Ta = 25℃) 电气参数

Item 项目	Symbol 标识	Condition 条件	Min. 最小值	Type 典型值	Max. 最大值	Unit 单位
Power Supply 电压	VDD	--	2.8	2.8	3.3	Volt
Supply Current 电流	IDD	V _{DD} =2.8V Nomal mode	--	--	--	mA
		V _{DD} =2.8V Green mode	--	--	--	mA
		V _{DD} =2.8V Sleep mode	--	--	--	uA

3. Optical Characteristics 光学参数

Item 项目	CONTENTS 内容	Remark 备注
Transparency 透过率	>86%	

4. Reliability 信赖性

Item 项目	Specifications 规格	Remark 备注
High Temperature Storage 高温存储	70℃,240hrs, Normalized for 2 hrs	
Low Temperature Storage 低温存储	-20℃,240hrs, Normalized for 2 hrs	Non-condensing 无结露
Temperature/ Humidity Storage 储存温度/湿度	-20-70 °C/85% 240hrs and normalized for 2 hrs	Non-condensing 无结露
High Temperature Operation 高温工作	60℃,24hrs , Perform well	
Low Temperature Operation 低温工作	-10 °C,24hrs , Perform well	Non-condensing 无结露
Temperature/ Humidity Operation 工作温度/湿度	-10-60℃/85%RH,240hrs , Normalized for 2 hrs	Non-condensing 无结露

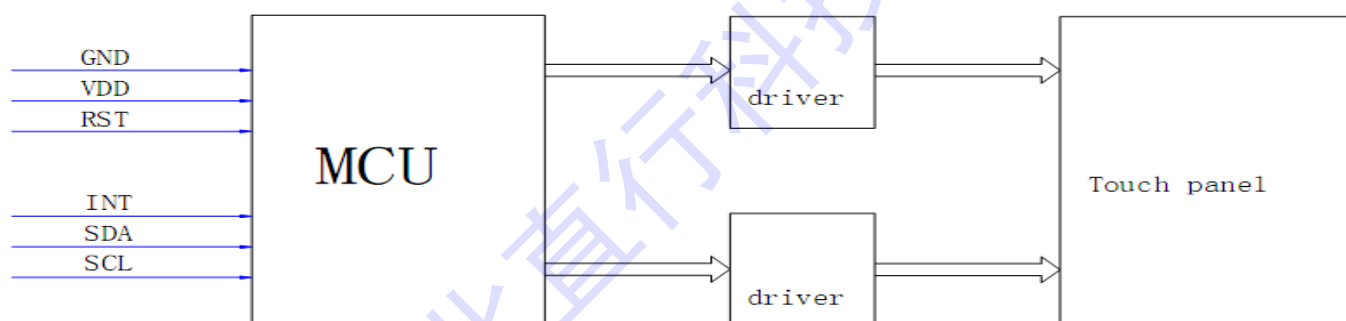
5. Durability 寿命

Item 项目	Specifications 规格	Condition 条件
Hitting life 撞击寿命	35,000,000 times	Hitting test may cause surface slight scratch yet the function stays intact 功能OK, 外观轻微刮伤判OK.
Panel Slide Test 滑动测试	250g, 20mm, 100,000 times	Slide test may cause surface slight scratch yet the function stays intact功能OK, 外观轻微刮伤判OK.

6. Touch panel description 触摸屏功能描述

6.1 touch panel drawing 外形图: See appendix

6.2 Block diagram 功能结构图



6.3 Touch panel pin assignment 引脚定义

Pin	Symbol	Description
1	GND	Power Ground.
2	VDD_2.8V	Power Supply.
3	SCL_2.8V	IIC clock for the data input.
4	SDA_2.8V	IIC Data input.
5	RST_2.8V	Reset pin for the TP.
6	INT_2.8V	Interrupt for the TP.

7. Appearance Inspection 外观检验

7.1 Inspection Conditions 检验条件

1. Environment: $22 \pm 3^{\circ}\text{C}$, Inspection distance : $30 \pm 10\text{cm}$.

2. Angle of Vision: 30°~ 90°

3. Lighting illumination: 17W fluorescent luminant lamp is used for appearance inspection. Detail of settings is shown in **figure 13.1 & 13.2** .

4. Minor impurities outside viewing area are acceptable unless their existence affect electrical functions.

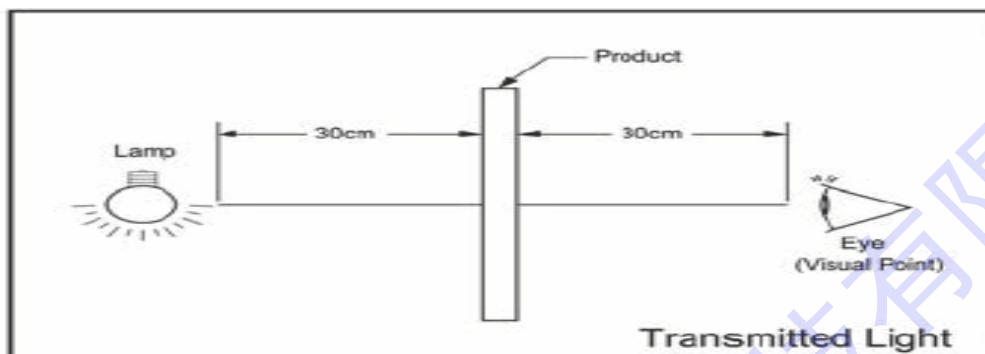


figure 13.1

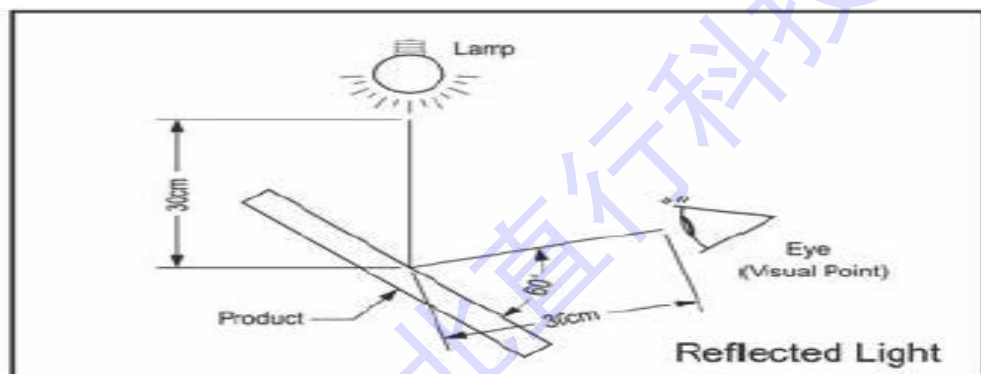


figure 13.2

7.2 Criteria 判定标准

Item 项目	Specification 规格
Particle 灰尘	(1) $D \leq 0.2$ OK (2) $0.15 < D \leq 0.2$ (each area contains ≤ 2 , total ≤ 3) OK (3) $D > 0.2$ NG
Linear Object 线状异物	(1) $W \leq 0.05$ OK (2) $0.05 < W \leq 0.1$ and $L \leq 3.0$, total ≤ 2 OK (3) $W > 0.1$ NG Remark: the particle will be ignored when it is removable by cleaning
Scratch 刮伤	(1) $W \leq 0.025$ OK (2) $0.025 < W \leq 0.05$ and $L \leq 12.0$, total ≤ 5 OK (3) $0.05 < W \leq 0.1$ and $L \leq 6$, total ≤ 5 OK

	(4) W>0.1 NG
Remark 备注	1. D=Diameter 2. W=Width 3. L=Length 4. Each area contains=20 μ s

8. Precautions 注意事项

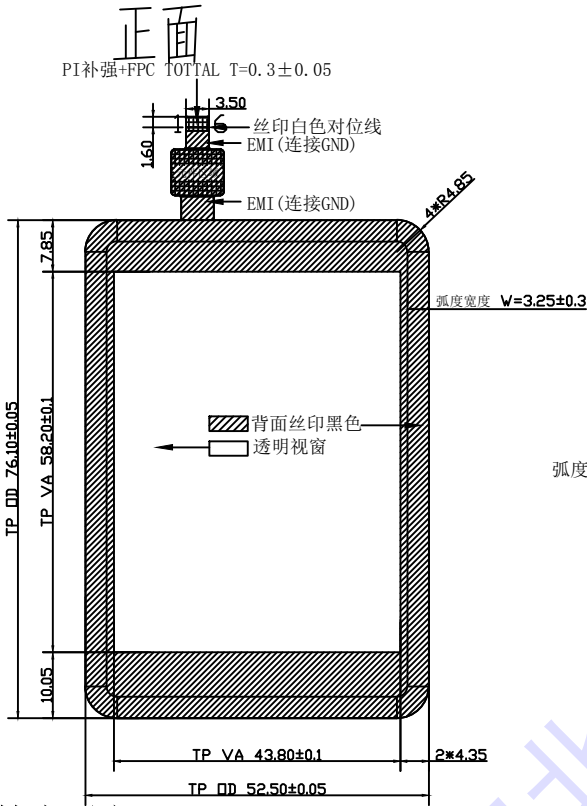
Storage 存储	Store panel under the temperature and humidity range pre-specified. Direct sunlight exposure or piling should be avoided.
Unpack 拆包	Unpack the box with the printed red arrow pointing up.
Handling 使用中	(3) Use clean sacks or glove to prevent fingerprints and/or stains left on the panel. Extra attention and carefulness should be taken while handling the glass edge. (4) Avoid high voltage and/or static charge (3) Holding the panel instead of the tail at all time.
Cleaning 清洁	(5) Use neutral detergent or isopropyl alcohol on a clean soft cloth to clean the panel surface (6) Prevent using any kind of chemical solvent, acidic or alkali solution.
Installing 安装	(1) Excessive force or strain to the panel or tail is prohibited. (2) Retain at least 0.3 mm clearance between panel and display module. (3) Gasket or cushion pads around the edge of the panel may segregate water and/or dust contamination.
Operating 操作	(1) Touch the panel with your finger or stylus only to assure normal operation. Any sharp edged or hard objects are prohibited. (2) Operate the panel in a steady environment. Abrupt variation on temperature and humidity may cause malfunction of the panel.
Others 其他	(1) Keep the panel surface clean. Prevent any kind of adhesive applied on the surface. (2) Avoid high voltage and/or static charge.

Appendix

客户签名:

侧面

背面



TOTAL T=1.35±0.1
LENS 基材T1=1.10±0.05
LENS 边缘厚度T2=0.40±0.05



I0电压是2.8V, 请主板确认。

技术要求:

Pin	Definition
1	GND
2	VDD_2V8
3	SCL_2V8
4	SDA_2V8
5	RST_2V8
6	INT_2.8V

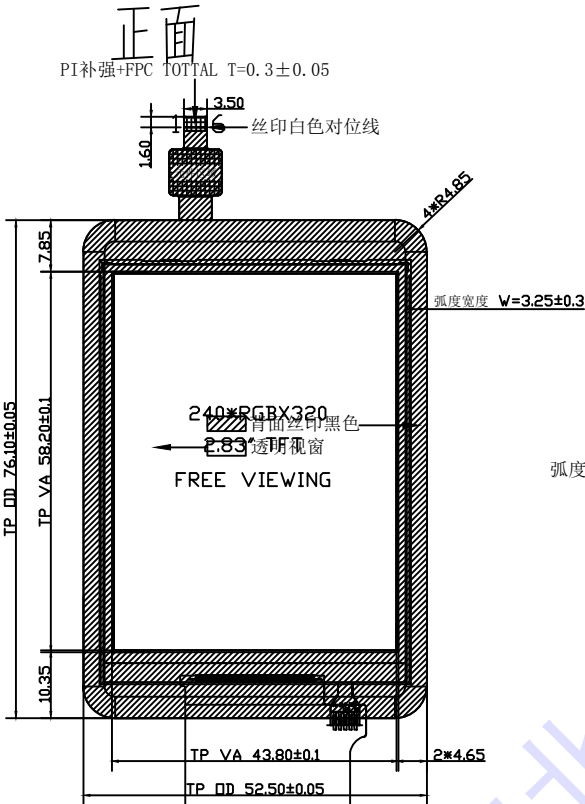
- 1、方案: IC-CS826 G+F(单点+手势)
- 2、产品透过率为86%以止
- 3、表面处理:正表面硬度6H以上
- 4、产品符合RoHS标准
- 5、未注明公差为: ±0.15mm

VER.	REVISED RECORD	DRAWN BY	DATE	CTP SPECIFICATION							
A1	NEW ISSUE	Pretty	2018-9-05	1. VDD	V	APPROVED BY			CUSTOM NO.		UNMARKED TOLERANCE ±0.2
A2	屏FPC加长30MM	Pretty	2018-12-08	2. OPERATION TEMP.	-20 ° C TO 70 °	CHECKED BY			DESIGN NO. & (VERSION)	A3	UNIT mm
A3	VA更改	Pretty	2019-4-25	3. STORAGE TEMP.	-30 ° C TO 80 °	CDRAWN BY	Pretty	2018-9-05	MODEL NO.	UT-CT028005	SHEET 1 OF 1
A4				4. CONNECTOR	FPC	REMARK					

客户签名:

侧面

背面



TOTAL T=1.35±0.1

LENS 基材T1=1.10±0.05

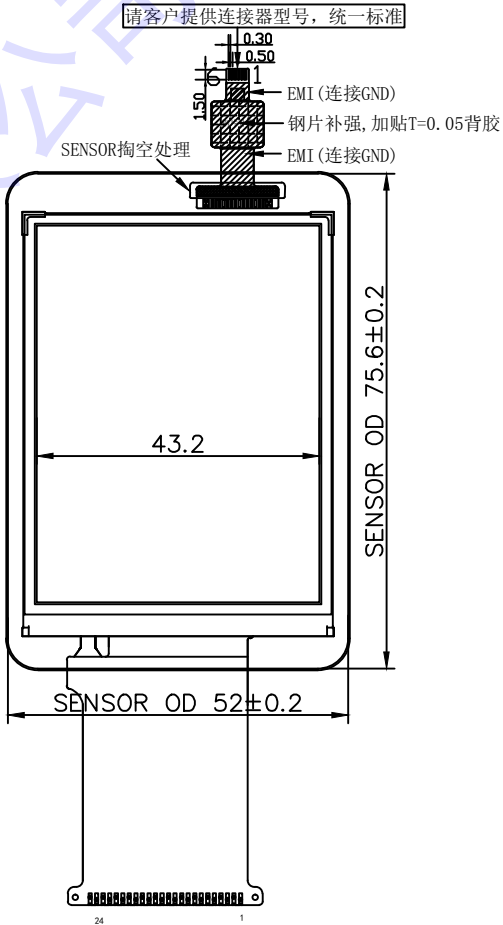
LENS 边缘厚度T2=0.40±0.05

SENSOR T=0.25

OCAT=0.175

LCM T=2.30±0.2

弧度根据图纸制作



Autodesk

I0电压是2.8V, 请主板上确认。

Pin	Definition
1	GND
2	VDD_2V8
3	SCL_2V8
4	SDA_2V8
5	RST_2V8
6	INT_2.8V

- 技术要求:
- 1、方案: IC-CS826 G+F(单点+手势)
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A4				4. CONNECTOR	FPC	REMARK				