



# **Product Specifications**

## **Resistive Analog Touch Panel**

**TR5-06414085**

Product Version: V6.4



**RoHS Compliance**

**Issue Date: Oct-02-2008**

**Document Version: 1.0**





## 1. General Specification:

Item		Specification
(1)	Type	Five-Wire Analog Resistive
(2)	Size	6.4"
(3)	Input Mode	Stylus or Finger
(4)	Cable	FFC
(5)	Total Thickness	1.40±0.20 mm
(6)	Frame Size	150.00±0.30 X 115.50±0.30 mm
(7)	View Area	133.60±0.20 X 101.40±0.20 mm
(8)	Active Area	130.60±0.20 X 98.40±0.20 mm
(9)	Tail Length	85.00±6.00 mm

## 2.1 Environmental Characteristics:

Item		Operation	Storage
(1)	Temperature	-10°C ~ +70°C	-40°C ~ +80°C
(2)	Humidity (Non Condensing)	20%RH ~ 80%RH	10%RH ~ 85%RH

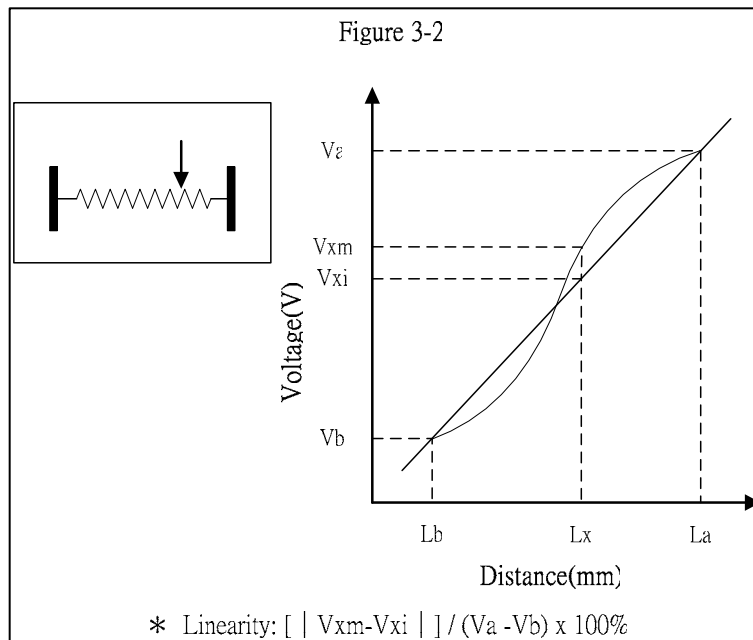
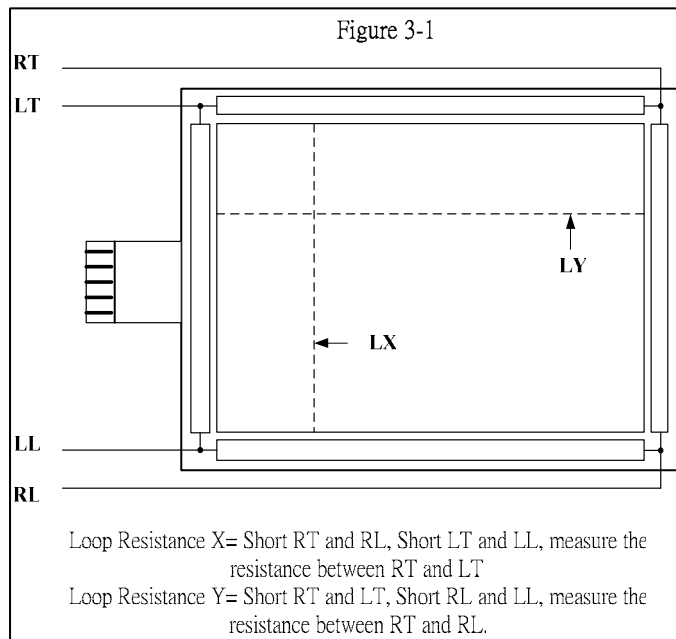
Note: All terms under 1 atmosphere.

## 2.2 Optical Characteristics:

Item		Specification
(1)	Transparence	80%±3% (Measured by BYK-Gardner)
(2)	Haze	8%±3%

## 3. Electrical Characteristics:

Item		Specification
(1)	Loop Resistance	X:20-500Ω, Y:20-500Ω (See Figure 3-1)
(2)	Linearity	X≤1.5%, Y≤2.0% (See Figure 3-2)
(3)	Chattering	≤ 15ms
(4)	Insulation	≥ 20MΩ/ 25V(DC)
(5)	Endurance	No acting damage at DC 50V/ 60sec



#### 4. Mechanical Characteristics:

	Item	Specification	Condition
<b>Panel</b>	<b>Operating Force</b>	Stylus=R0.8	$\leq 50g$
	<b>Impact</b>	13.0ØDIA. Steel ball/9g, Height= 30cm	1 time, no damage[Impact at center area]
	<b>Static Load</b>	500g within 10cm <sup>2</sup> area for 30sec	Satisfy(1) of Item 4 and (1),(2),(4) of Item 3
	<b>Hardness</b>	3H pencil, pressure 1N/45°	$\geq 3H$
<b>Tail</b>	<b>Peeling</b>	800g/cm by vertical 90°	Satisfy(1) of Item 3
	<b>Bending</b>	135° 10 times left and Right	Satisfy(1) of Item 3

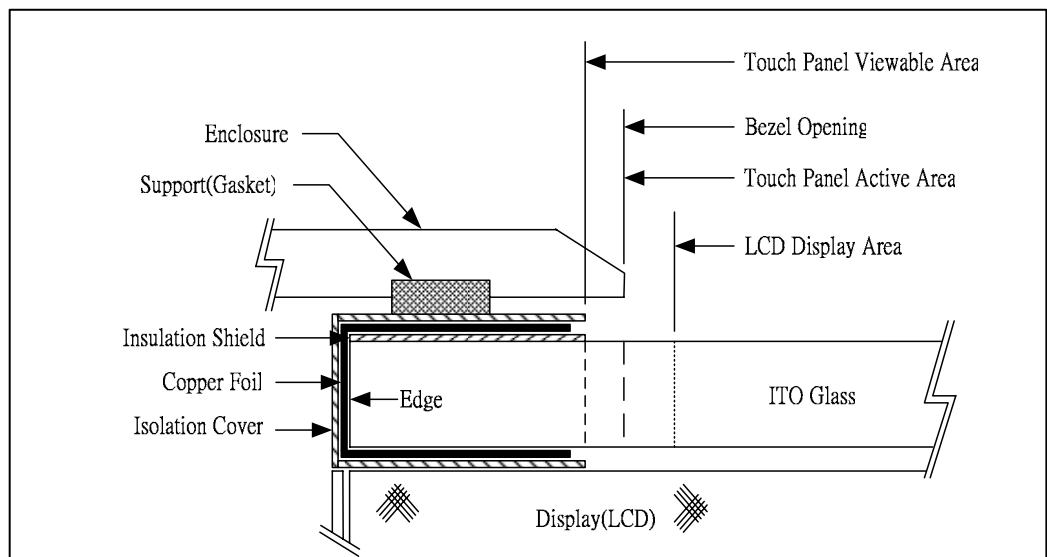
**5. Reliability:**

Item		Specification	Condition
Panel	High Temperature / Humidity	70°C/90%RH,500hrs, then panel is in left in normal environment for 4hrs.	Reliability test may cause the film puffed yet the electric characteristics stays intact. (1), (2) of Item 2.2; (1), (4) of Item 3; (2) of Item 3 satisfies $X \leq 2.5\%$ , $Y \leq 3.0\%$
	High Temperature	70°C/500hrs, then panel is in left in normal environment for 4hrs.	
	Low Temperature	-40°C/500hrs, then panel is in left in normal environment for 4hrs.	
	Thermal Cycle	-40°C~70°C, [60min /cycle]*100cycles, then panel is in left in normal environment for 4hrs.	

**6. Durability:**

Item		Specification	Condition
Panel	Knock Test	35,000,000 times	Satisfy (1), (2) of Item 2.2; (1), (4) of Item 3; (2) of Item 3 satisfies $X \leq 2.5\%$ , $Y \leq 3.0\%$

**7. Figure: Touch Screen**



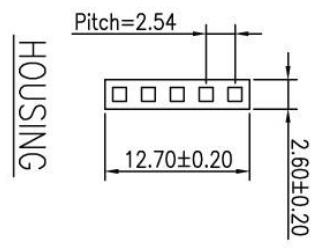
## **8. Caution**

- i Cleaning:
  - \* Use the neutral detergent or isopropyl alcohol on a clean soft cloth to clean the panel surface. Chemical solvent, acidic, or alkali liquid are not allowed.
  
- ii Installation:
  - \* Bezel edge must be positioned in the area between the active area and view area. The bezel may press the touch screen and cause activation if the edge touches the active area. A gap of approximately 0.5 mm is needed between the bezel and top electrode. It may cause unexpected activation if the gap is too narrow. There is a tolerance of 0.2 to 0.3 mm for the outside dimensions of the touch panel and tail. A gap must be made to absorb the tolerance in the case and connector.
  
  - \* Do not use adhesive to bond top surface (ITO Film) of touch panel with enclosure.
  
  - \* Gasket or cushion pads around the edge of panel are recommended to segregate water and/or dust contamination.
  
- iii Operating:
  - \* Touch the panel with your finger or stylus only to assure normal operation. Any sharp edged or hard objects are prohibited.
  
  - \* Operate the panel in a steady environment. Abrupt variation on temperature and humidity may caused malfunction of the panel.
  
  - \* Avoid high voltage and/or static charge.

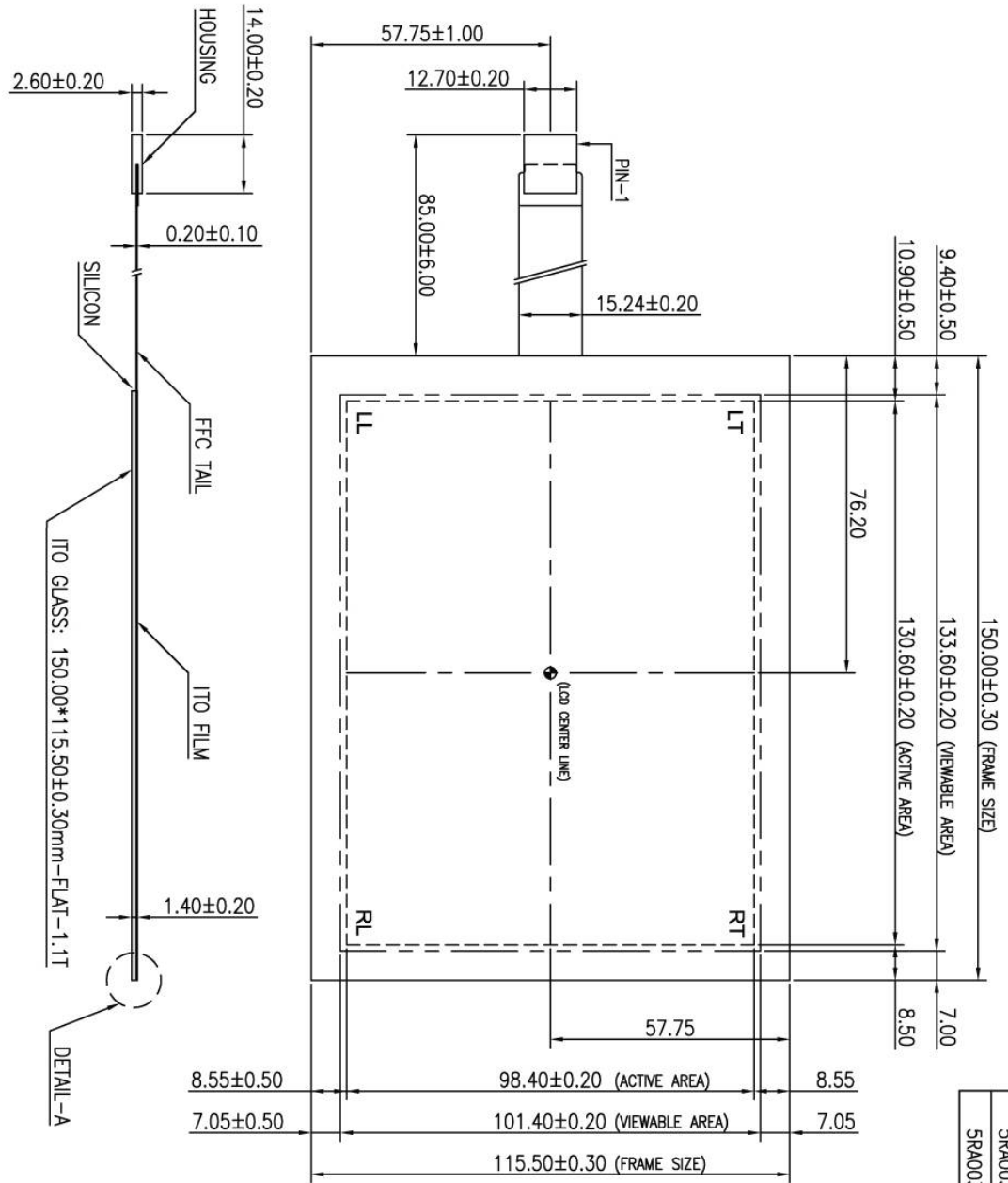
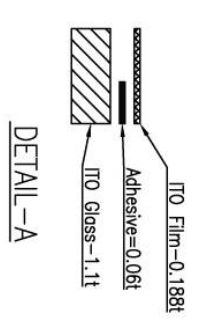
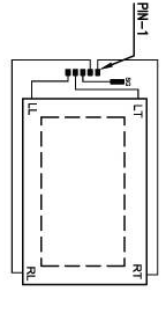
## **9. Warranty**

- \* The product is guaranteed for one year after shipping, however, products shall not be guaranteed under the following conditions.
  1. Damages caused by improper handling from clients, including shipping, installation, and integration.
  2. Natural calamity or disaster after receiving the products.
  3. Repaired, modified, disassembled without permission.

TOUCHSCREEN TABULATION	
PART NUMBER	TYPE
5RA003G	CLEAR
5RA003N	ANTI GLARE



CONNECTOR PINOUT	
PIN NO.	DESIGNATION
1	RT
2	RL
3	SG
4	LT
5	LL



**Spectrah Dynamics Inc.**

DESCRIPTION	Resistive Touch Unit	DATE	Oct. 08, 2008	APPROVED	Evan	Rev.	B
MODEL	TR5-06414085	SCALE	-/-	DESIGN		Page	of
PART NO.		UNIT	mm.	DRAWING		B-Page	of

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