

Product Specifications

Resistive Analog Touch Panel

TR5-09014155

Product Version: V6.4



RoHS Compliance

Issue Date: Oct-02-2008 Document Version: 1.0



Revision History

No.	Version	Date	Summary of Changes	Page

<Remarks>

1. General Specification:

Item		Specification
(1)	Туре	Five-Wire Analog Resistive
(2)	Size	9.0"
(3)	Input Mode	Stylus or Finger
(4)	Cable	FFC
(5)	Total Thickness	1.40±0.20 mm
(6)	Frame Size	212.90±0.30 X 134.70±0.30 mm
(7)	View Area	200.40±0.20 X 121.70±0.20 mm
(8)	Active Area	197.40±0.20 X 118.70±0.20 mm
(9)	Tail Length	155.00±6.00 mm

2.1 Environmental Characteristics:

Item		Operation	Storage
(1)	Temperature	$-10^{\circ}C \sim +70^{\circ}C$	$-40^{\circ}\mathrm{C} \sim +80^{\circ}\mathrm{C}$
(2)	Humidity (Non Condensing)	20%RH ~ 90%RH	10%RH ~ 90%RH

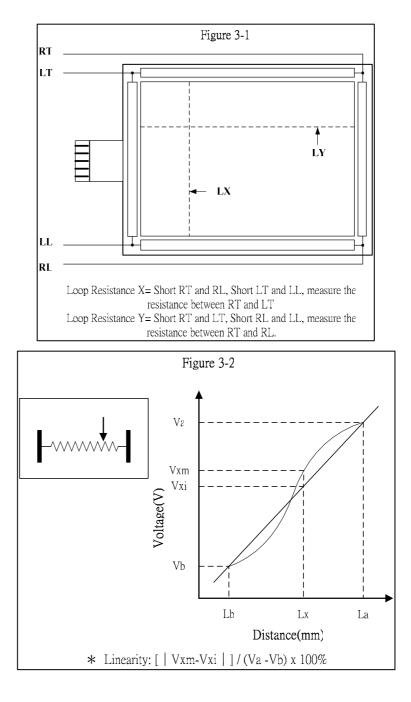
Note: All terms under 1 atmosphere.

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:20-500 Ω , Y:20-500 Ω (See Figure 3-1)	
(2)	Linearity	$X \le 1.5\%, Y \le 1.5\%$ (See Figure 3-2)	
(3)	Chattering	$\leq 15 \mathrm{ms}$	
(4)	Insulation	$\geq 20 \mathrm{M}\Omega/25 \mathrm{V(DC)}$	
(5)	Endurance	No acting damage at DC 50V/ 60sec	



4. Mechanical Characteristics:

Item		Specification	Condition
	Operating Force	Stylus=R0.8	\leq 50g
Panel	Impact	13.0ØDIA. Steel ball/9g, Height= 30cm	1 time, no damage[Impact at center area]
r allei	Static Load	500g within 10cm2 area for 30sec	Satisfy(1) of Item 4 and (1),(2),(4) of Item 3
	Hardness	3H pencil, pressure $1N/45^{\circ}$	≥3H
Tail	Peeling	800g/cm by vertical 90°	Satisfy(1) of Item 3
1 811	Bending	135° 10 times left and Right	Satisfy(1) of Item 3

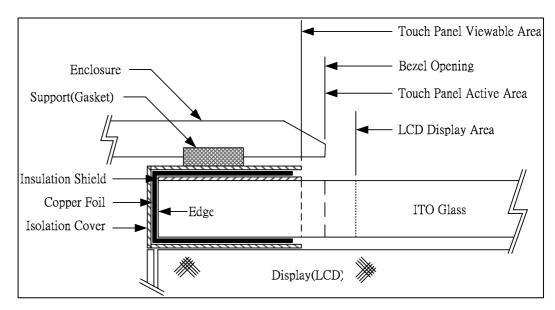
5. Reliability:

Item		Specification	Condition
	High Temperature / Humidity	70°C/90%RH, 500hr, 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 $X \le 2.5\%$, $Y \le 2.5\%$
	High Temperature	70°C/500hrs, then panel is in left in normal environment for 4hrs.	
Panel	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		Satisfy (1), (2) of Item 2.2; (1), (4) of Item 3; (2) of Item 3 satisfies $X \le 2.5\%$, $Y \le 2.5\%$

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.
		 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.

