

# 1. General Specification

ITEM	STANDARD VALUE	UNIT
Outline dimension	140.0±0.2(L) x 104.0±0.2(W) x 1.5±0.1(T)	mm
View area	122.1(L) x 93.3(W)	mm
Active area	119.2(L) x 90.3(W)	mm

# 2. Absolute Maximum Ratings

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Operating Temperature	T <sub>OP</sub>	-10	—	+60	°C
Storage Temperature	T <sub>ST</sub>	-40	—	+80	°C
Operating temperature		20		90	%RH
Storage temperature		20		90	%RH
Light transmission			80		%
Notes Life		10 <sup>5</sup>			Words
Input Life		10 <sup>6</sup>			Times

# 3. Reliability

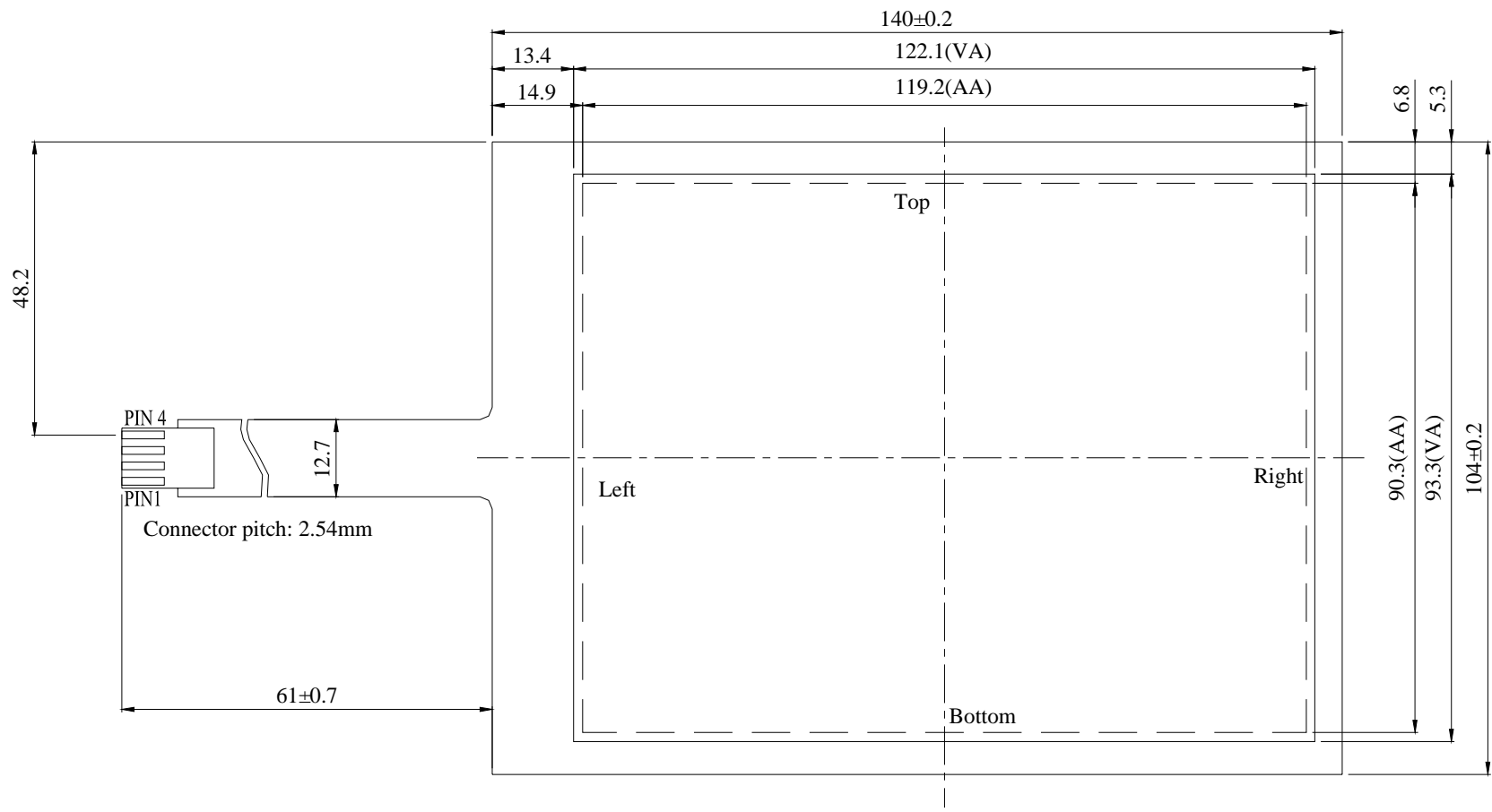
## ■ Content of Reliability Test

Environmental Test			
Test Item	Content of Test	Test Condition	Applicable Standard
High Temperature storage	Endurance test applying the high storage temperature and operating test .	60°C 120hrs	—
Low Temperature storage	Endurance test applying the high storage temperature for a long time.	-10°C 120hrs	—

\*\*\*The test of above being finished, touch screen must satisfy the specification as below:

Resistance between leads :

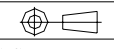
- (1) Film : 570~920 Ohm , Glass: 220 ~ 330 Ohm
- (2) Linearity : Less than 1.5%
- (3) Insulation resistance: 10M Ohm or more.



PIN NO.	Assignment
1	Right
2	Left
3	Bottom
4	Top

TOUCH PANEL PIN ASSIGNMENT

The non-specified tolerance of dimension is ±0.3mm.

SCALE:	1/1	UNIT:	mm	華凌光電股份有限公司 WINSTAR DISPLAY CO.
REV:	0		PAGE:	
APPROVE		MODEL		
CHECK		TS320240BRNO		
DRAW	Nina 11/08/05'	TITLE		
		TS DRAWING		
		DWG NO.		

## 4. Material List of Components for RoHs

1. WINSTAR Display Co., Ltd hereby declares that all of or part of products (with the mark “#”in code), including, but not limited to, the LCM, accessories or packages, manufactured and/or delivered to your company (including your subsidiaries and affiliated company) directly or indirectly by our company (including our subsidiaries or affiliated companies) do not intentionally contain any of the substances listed in all applicable EU directives and regulations, including the following substances.

Exhibit A : The Harmful Material List

Material	(Cd)	(Pb)	(Hg)	(Cr6+)	PBBs	PBDEs
Limited Value	100 ppm	1000 ppm	1000 ppm	1000 ppm	1000 ppm	1000 ppm
Above limited value is set up according to RoHS.						

2.Process for RoHS requirement :

(1) Use the Sn/Ag/Cu soldering surface ; the surface of Pb-free solder is rougher than we used before.

(2) Heat-resistance temp. :

Reflow : 250°C,30 seconds Max. ;

Connector soldering wave or hand soldering : 320°C, 10 seconds max.

(3) Temp. curve of reflow, max. Temp. : 235±5°C ;

Recommended customer's soldering temp. of connector : 280°C, 3 seconds.