



Touch Panel Family

Technical Specifications

Revision 1.0

For TouchPanel20464 and TouchPanel240128

Revision History

Revision	Description	Author
1.0	Initial Release	Clark

Contents

Revision History.....	1
Touch Panel 24064	3
Dimensional Outline:.....	3
Viewing Area:	3
Operation Force:	3
Input Voltage:	3
Hardness:	3
Tapping durability:	3
Environmental Specifications.....	3
Optical Specifications.....	3
Touch Panel Characteristics.....	3
Touch Panel 240128	4
Dimensional Outline:.....	4
Viewing Area:	4
Operation Force:	4
Input Voltage:	4
Hardness:	4
Tapping durability:	4
Environmental Specifications.....	4
Optical Specifications.....	4
Touch Panel Characteristics.....	4
Precautions	5
Storage	5
Handling	5
Installing.....	5
Cleaning	6
Operating.....	6
Drawings.....	7
Touch Panel 24064	7
Touch Panel 240128.....	8

Touch Panel 24064

Dimensional Outline: 154.80×56.80×1.50mm

Viewing Area: 135.20 ×42.20mm

Operation Force: 60-100g

Input Voltage: 5VDC

Hardness: >3H

Tapping durability: >1,000,000

Environmental Specifications

Table 1: Environmental Specifications

	Operation	Storage
Temperature	-10°C to +60°C	-20°C to +70°C
Humidity	<90% Relative Humidity	<90% Relative Humidity

Optical Specifications

Table 2: Optical Specifications

Transmittance	>75%
---------------	------

Touch Panel Characteristics

Linearity: < 1.5%

Chattering Time: <10ms

Insulation resistance: >10MΩ at 25VDC

Connector Tail: FPC

Touch Panel 240128

Dimensional Outline: 132×79.2×1.53 mm

Viewing Area: 116.95×66.55 mm

Operation Force: 10-100g

Input Voltage: 5VDC

Hardness: >3H

Tapping durability: >1,000,000

Environmental Specifications

Table 3: Environmental Specifications

	Operation	Storage
Temperature	-10°C to +60°C	-20°C to +70°C
Humidity	<60% Relative Humidity	<50% Relative Humidity

Optical Specifications

Table 4: Optical Specifications

Transparency	>80%
Haze	<15%
Clarity	>65%
Gloss	>170GU

Touch Panel Characteristics

Linearity: < 1.5%

Chattering Time: <15ms

Insulation resistance: >10MΩ at 25VDC

Connector Tail: FPC

Precautions

Storage

Store products within the temperature and humidity specifications outlined, ensuring they are not exposed to direct sunlight or excess stress.

Do not stack panels atop one another or store in an environment containing acidic gases.

Handling

To preserve the transparency of the product, use clean gloves and handle the edge of the unit to protect against scratches or finger prints on its face.

Glass edges of the product are not chamfered, please use gloves to avoid injury from sharp corners when handling.

To reduce the likelihood of scratches or cracks, do not stack heavy, hard, or sharp objects on top of the product. Likewise, do not stack products on top of one another.

Do not handle the product using the flexible FPC tail connector.

Handle only one product at a time to reduce the likelihood of damage.

Should the product break, it does contain glass which may cause injury when shattered. Take care and use gloves when handling the damaged product

Installing

The FPC tail is fragile; please ensure excessive force is not applied to the connector to prevent it from disconnecting from the glass assembly. When bending, ensure a diameter of no less than 1.5mm. Furthermore, do not mount any components to the FPC connector.

Do not fold the FPC tail to connect, insert only via the wire termination at the connectors end.

Transparency is provided by an air groove in the assembly. When designing the product into an assembly, ensure that it is not exposed to liquid or fine particles.

When encasing the display, please allow a clearance of 0.2-0.5mm above the product and ensure the boundary of the active area is covered such that only the active area can be used. Operation is not guaranteed outside the active area and can damage the product.

When encasing the product, it is recommended that the outside connection to the housing be made of plastic and padded with soft materials. The connection to the display underneath should be made with non corrosive glue.

Do not mount product in the presence of a vulcanized material that may omit sulfur gasses as these will damage the product assembly.

The conductor of the panel extends to the edge of the product; please ensure conductive material does not touch the edge of the panel.

As the corners of the product are not chamfered, it is recommended that relief areas be added around the product in the chassis window to ensure an accurate fit.

When attaching the product to a display, ensure that a tight seal is made between the panel and the screen so that no gap is present. Do not remove the product from a display once applied.

Please note that dew gathering in the panel due to abrupt changes in temperature or humidity may adversely affect the performance of the product.

Cleaning

Use a soft, ethanol or Sherwood oil moistened cloth, such as deerskin, to clean the product. Do not allow the ethanol to seep into the film joints of the product and skew visibility.

Do not use alkaline detergents, including glass cleaner, cleaning solvents, denatured alcohol, or nail polish remover to clean the product as these will damage the panel surface.

Do not use any organic solvent or detergent other than ethanol.

When cleaning the FPC tail, wipe along the length of the connector rather than across it.

Use only finger pressure only to clean, hard or sharp objects may damage the product.

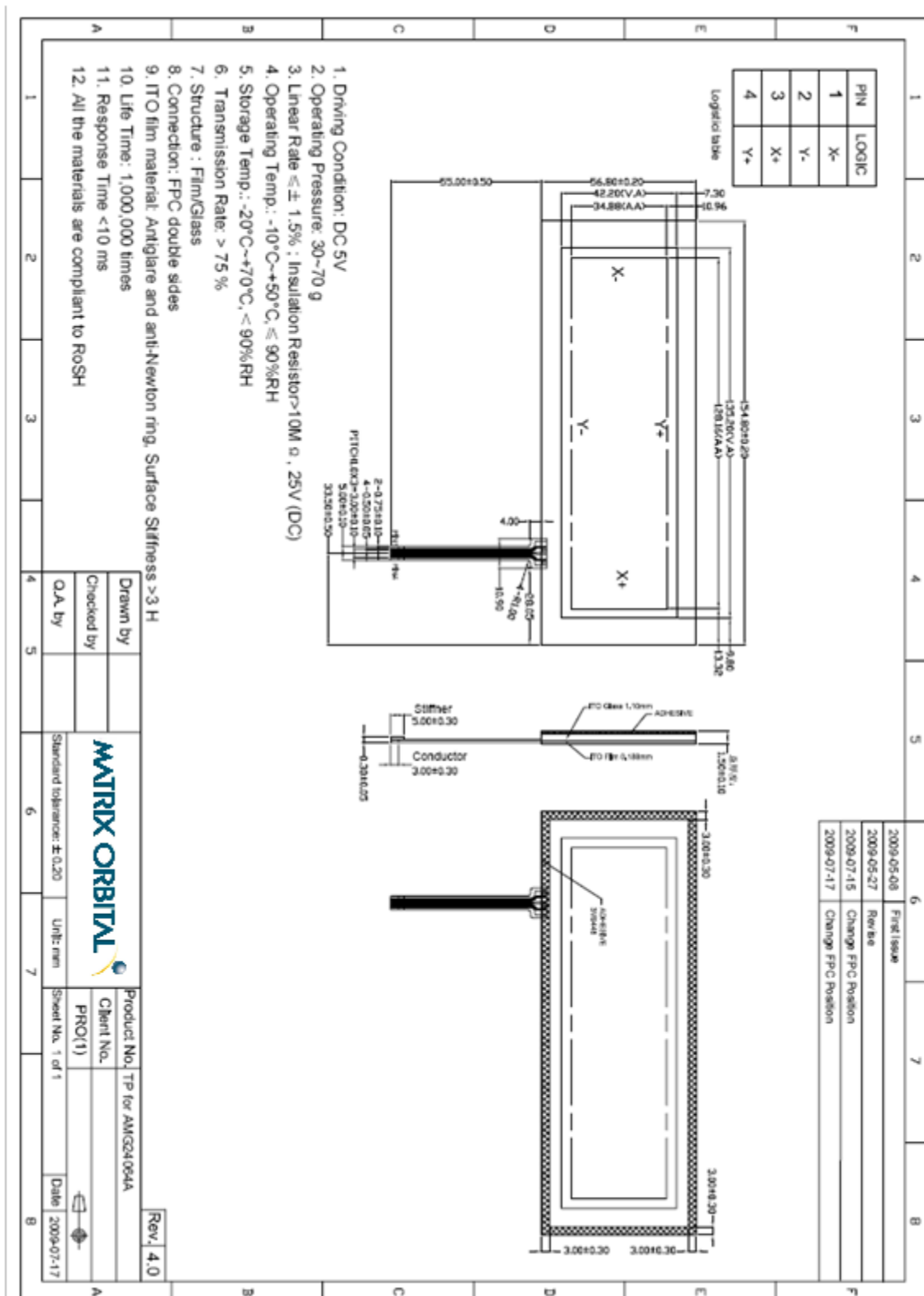
Operating

Please operate the product with pressure applied by a finger to polyacetal pen only avoid scratching the surface of the panel.

Do not operate the product with a sharp instrument such as a pen or pencil.

Input voltages may adjust over time or temperature. A circuit or software adjustment mechanism is recommended to calibrate the product.

Touch Panel 24064



8

Structure and Area definition

A. Active area
The area which guarantees a touch panel operation with the following characteristics when passed:
(1) Operation force, (2) Electric characteristics, (3) Tearing durability, (4) Pen sliding durability.

B. The area which does not guarantee a touch panel operation and its function
When this area is pressed, touch panel shows degradation of its performance and durability such as a period during which the touch panel does not operate correctly, excessive force/pressure (A) as quantified area) and its operation time/pressure about double A, about 0.5 mm distance from a boundary of the active corresponds to this area.

C. Guard area (Inactivation area)
The area which forbids pressing, because an excessive load is applied to transparent electrode and a serious damage is given to touch panel function by pressing.

D. Non active area
The area which does not activate even if passed.

Pin#	Assignment
1	left
2	bottom
3	right
4	top

Front View

Back View

DESIGN CHECK

DESIGN	W.F	DATE	06-02-24
CHECK	L.X.H	DATE	06-02-24

GEE06S.ITO.716 DRAWING

SHEET	A4	SCALE	Ver.2
1 of 1	m m	1 : 1	

[illegible]