

Datasheet

Fortec Integrated

TF-DD4300-A00

43.0" wide PCAP Touch Foil

ILI

TO-09-379

 APOLLO DISPLAY
TECHNOLOGIES



FORTEC
INTEGRATED



FORTEC
UNITED KINGDOM



The information contained in this document has been carefully researched and is, to the best of our knowledge, accurate. However, we assume no liability for any product failures or damages, immediate or consequential, resulting from the use of the information provided herein. Our products are not intended for use in systems in which failures of product could result in personal injury. All trademarks mentioned herein are property of their respective owners. All specifications are subject to change without notice.

Contents

1. Product Structure:	-----4
2. Mechanical properties:	----- 4
3. Electrical characteristics:	----- 4
4. Optical properties:	-----5
5. Environmental and Reliability Parameters:	-----5
6. Inspection standards:	----- 6
7. Packaging and shipping:	----- 9
8. Precautions:	----- 9

TF-DD4300-A00

1.

Item	Content	Unit
product structure	Film-sensor + FPC	/
sensor thickness	0.43	mm

2.

Item	Content	Unit
Overall dimensions (sensor)	962.18*556.92	mm
Action area (AA)	944.18*532.42	mm
Visual area (VA)	/	mm
Window size TP	43	Inch
Number of channels X/Y	TX59;RX105	/
Interface type	USB/IIC	/
IC model	ILITEK ILI2323PC	/

3.3. Electrical characteristics (Ta=25°C):

Item	Condition	Minimum value	Typical value	Maximum value	Unit
Operating Voltage	IIC	2.8	3	3.3	V
	USB	4.8	5	5.2	V

TF-DD4300-A00

4.Optical properties:

Item	Content	Wavelength
Total light transmittance	$\geq 85\%$	Visible light 550nm
Haze	/	/

5.Environmental and reliability parameters:

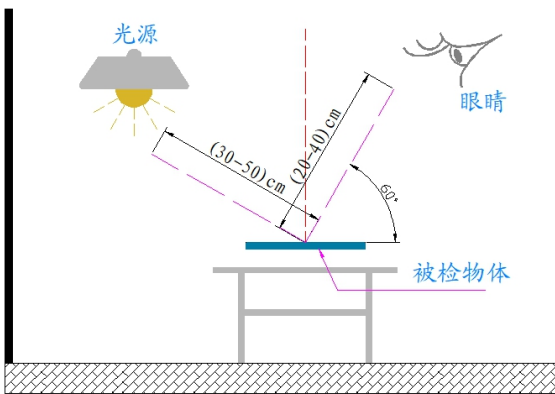
Item	Content
Working temperature and humidity range	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$, 0% to 90%RH
Thermal shock	The temperatures were set to $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ respectively, each stay for 0.5 hours as one cycle, and 10 cycles were performed.
High temperature and high humidity storage	Temperature is $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$, humidity is $90\%RH \pm 3\%RH$, storage is 48 hours
Low temperature storage	Temperature is $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, storage for 24 hours
High temperature storage	The temperature is $90^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and stored for 24 hours.

TF-DD4300-A00

6. Inspection standards:

6.1

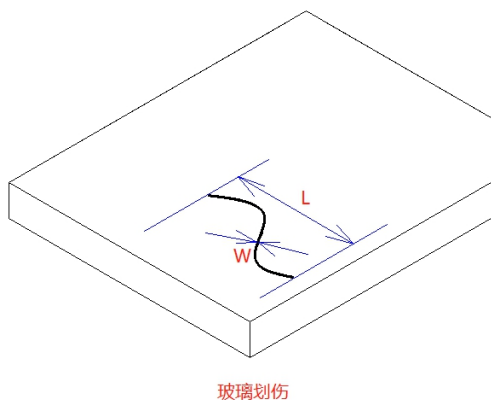
Appearance inspection standards (conditions):



Detection conditions	Detection parameters
Light intensity on product surface	30+/-10cm
Detection distance	30+/-10cm
Detection angle	>60 度
Power strength	12-20W
Inspection diagram	See picture on the left

6.1.1

Appearance inspection standards (glass scratches):



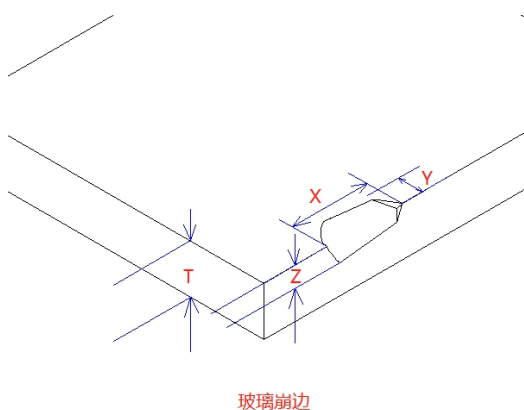
Item	Standard	Allowable range
glass scratched	$W \leq 0.02\text{mm}$	The distance between it and other defects is $\geq 10\text{mm}$ and can be ignored.
	$0.02\text{mm} < W \leq 0.10\text{mm}$	$L \leq 5\text{mm}$; the distance from other defects is $\geq 50\text{mm}$, only two are allowed.
	$W > 0.10\text{mm}$ There are scratches	Not accepted
Diagram of defective products		See picture on the left

TF-DD4300-A00

6.1.2 Appearance inspection standards (point-like debris):

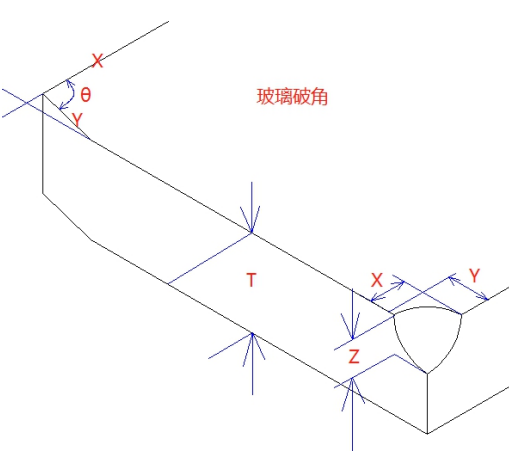
Item	Standard	Allowable range
Dotted& sundries	$D \leq 0.10\text{mm}$	The distance from other defects $>3\text{mm}$ can be ignored.
	$0.10 \text{ mm} < D \leq 0.30\text{mm}$	The distance from other defects is $\geq 15\text{mm}$, only 2 are allowed.
	$D > 0.30\text{mm}$	Not accepted
	Do not wipe dirt	Within 5 seconds, it can be invisible from a distance of 30cm

6.1.3 Appearance inspection standards (glass chipping & broken corners):

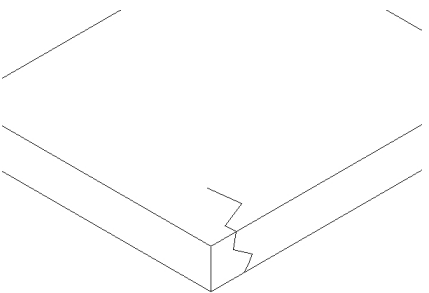


Item	Standard	Allowable range
glass chipping	$X \leq 1, Y \leq 0.5\text{MM}, Z \leq T/2$ are acceptable; if exceeded, NG	The distance from other defects is $\geq 10\text{mm}$, and the allowed number is $N \leq 10$
bad schematic		See picture on the left

TF-DD4300-A00

	Item	Standard	Allowable range
	Glass broken angle & included angle	$X \leq 1, Y \leq 0.5\text{MM}, Z \leq T/2$ are acceptable; if exceeded, NG	Allowed number $N \leq 2$
		The angle between X and Y: $90^\circ \leq \theta < 120^\circ$	Allowed number $N \leq 2$, smooth arc
bad schematic			See picture on the left

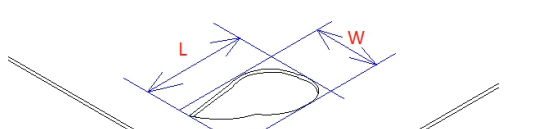
6.1.4 Appearance inspection standards (glass cracks):

	Item	Standard	Allowable range
	glass crack	not allowed to exist	Allowed number $N=0$
	bad schematic		See picture on the left

6.1.5 Appearance inspection standards

(holes in coating material layer):

TF-DD4300-A00

	Item	Standard	Allowable range
	protective film	$W \leq 0.5\text{mm}$, $L \leq 3\text{mm}$	Allowed number $N \leq 10$
	silver thread	$1/3) \text{mm}$, $L \leq 0.3\text{mm}$	The impedance is within the setting range
	Insulating glue	$W \leq 0.1\text{mm}$, $L \leq 0.3\text{mm}$	Allowed number $N \leq 20$
	bad schematic		See picture on the left

7. Packaging and transportation:

7.1 Packaging

Products shipped in bulk are packed in cartons & wooden boxes.

7.2 Transportation

Avoid direct exposure of products to direct sunlight during transportation

8. Precautions:

8.1 Storage considerations

Products must be stored in an environment with constant temperature and humidity. The temperature requirement is $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and the humidity requirement is $60\% \pm 5$. Be careful not to expose it to direct sunlight or heavy objects. Try to avoid product contact with water, organic solvents, acidic substances and sulfuric acid compounds, etc.

8.2 Transportation precautions

TF-DD4300-A00

The transparency of the product must be maintained, so please wear clean finger cots, gloves and a face mask before handling the product to avoid leaving fingerprints or stains, and hold the product on all sides when handling it.

When taking out the product, do not hold the leads to avoid loosening of the product and leads.

Do not stack products to avoid scratches and poor appearance.

Do not place heavy, hard or sharp objects on the product.

8.3 Operation precautions

Do not pull the FPC hard to avoid poor electrical connection inside the product; do not twist or bend the FPC output terminal to avoid poor connection between the FPC and the controller.

Do not bend or disassemble this product.

8.4 Installation Precautions

Do not apply excessive pressure on the touch screen to cause damage to the product.

Try to avoid the generation of static electricity during installation.

8.5 Other things to note

Avoid high voltage and/or static electricity

For products made of glass, the product glass may be broken due to something falling on the panel or too many things pressing on the panel (this is unavoidable), and the broken glass may cause damage. Therefore, handle the product with care.

Our company network supports you worldwide with offices in Germany, Austria, Switzerland, the UK and the USA.
For more information please contact:

Headquarters

Germany



FORTEC
GROUP

FORTEC Elektronik AG
Augsburger Str. 2b
82110 Germering

Phone: +49 89 894450-0
E-Mail: info@fortecag.de
Internet: www.fortecag.de

Fortec Group Members

Austria



FORTEC
INTEGRATED

FORTEC Integrated GmbH Office Vienna
Nuschinggasse 12
1230 Wien

Phone: +43 1 8673492-0
E-Mail: info@fortec-integrated.de
Internet: www.fortec-integrated.de

Germany



FORTEC
INTEGRATED

FORTEC Integrated GmbH
Augsburger Str. 2b
82110 Germering

Phone: +49 89 894363-0
E-Mail: info@fortec-integrated.de
Internet: www.fortec-integrated.de

Switzerland



FORTEC
SWITZERLAND

FORTEC Switzerland AG
Bahnhofstraße 3
5436 Würenlos

Phone: +41 44 7446111
E-Mail: info@fortec.ch
Internet: www.fortec.ch

United Kingdom



FORTEC
UNITED KINGDOM

FORTEC Technology UK Ltd.
Osprey House, 1 Osprey Court
Hinchingbrooke Business Park
Huntingdon, Cambridgeshire, PE29 6FN

Phone: +44 1480 411600
E-Mail: info@fortec.uk
Internet: www.fortec.uk

USA



 **APOLLO DISPLAY**
TECHNOLOGIES
A FORTEC GROUP MEMBER

Apollo Display Technologies, Corp.
87 Raynor Avenue, Unit 1
Ronkonkoma, NY 11779

Phone: +1 631 5804360
E-Mail: info@apolloDisplays.com
Internet: www.apolloDisplays.com