

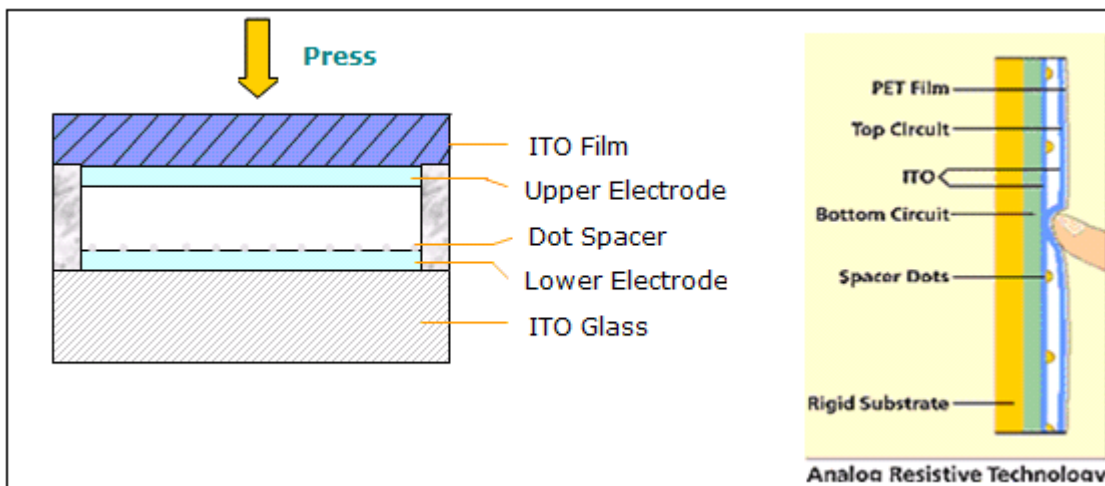
Resistive Touch Screen:

A resistive touch screen panel is composed of several layers, the most important of which are two thin, electrically conductive layers separated by a narrow gap. When an object, such as a finger, presses down on a point on the panel's outer surface the two metallic layers become connected at that point: the panel then behaves as a pair of voltage dividers with connected outputs. This causes a change in the electrical current, which is registered as a touch event and sent to the controller for processing.

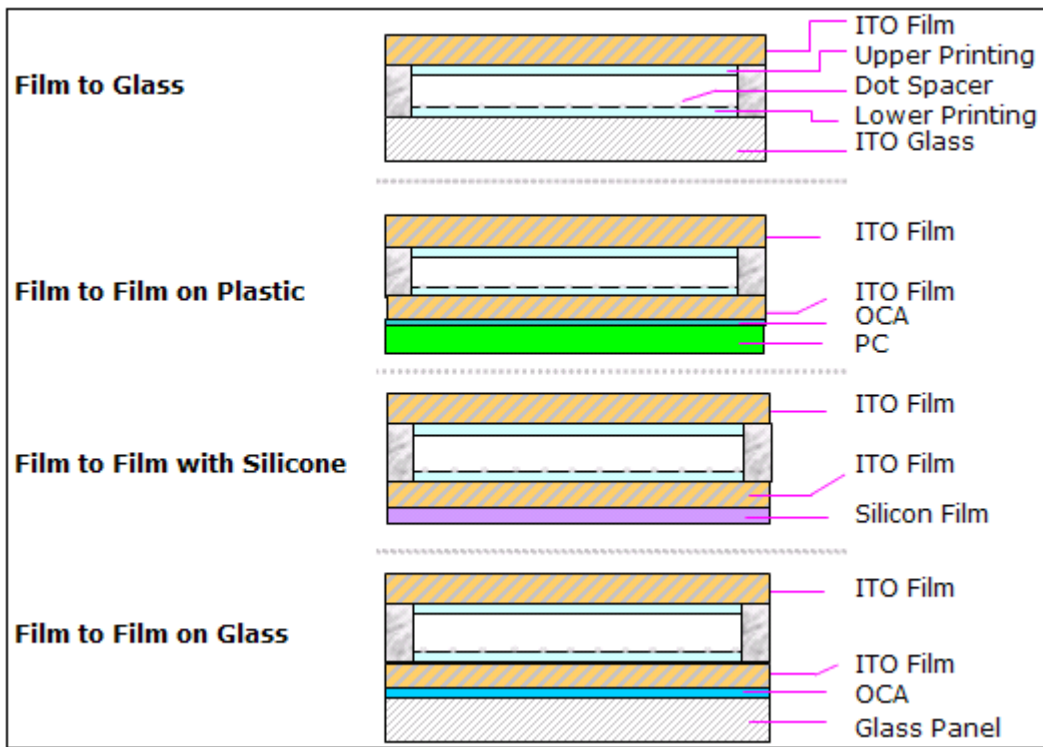
Characteristics:

Resistive touch panel consists of upper and bottom ITO fields, dot spacer and electrode. People touch the panel to conduct electricity between the fields, then the controller will calculate and obtain the result for X and Y coordinates.

Simple Structure/Easy Manufacturing/Cost-Effective.



Traditional resistive touch panel consists of one ITO film (upper electrode) and one ITO glass (bottom electrode). They are printed of silver conduct line and separated by dot spacers, which are printed on the bottom glass. Finally, these two layers are combined by glue. Besides traditional resistive Film/Glass type, VIT has different type structure, such as Film/Film/PC, Film/Film/Silicon, and Film/Film/Glass



Physical Specification

Optical

TP Structure	Film Surface Treatment	Specification
Film to Glass	Clear type	Min. 83%, Typical 85%
	Anti-Glare	Min. 81%, Typical 83%
Film to Film on PC/Film to Film with Silicon	Anti-Glare	Min. 79%, Typical 81%
Film to Film on Glass	Clear type	Min. 79%, Typical 80%

Hardness

Description	Spec.	Remark
Input Method	Finger or others	/
Activation Force	80 g	R 0.8mm
Hardness of surface	3H	JIS K 5400
FPC Peeling Force	Minimum 300 g/cm	Pull upward by 90°↑
FPC Bending Resistance	Meet electrical spec. after testing	Bending degree: 180°
		Bending radius: R1 mm
		Bending times : 30 times

Durability

Description	Spec.	Remark
Pen Sliding Durability	>10 ⁵ Times	End shape:R0.8 mm

		Material of Pen: Poly-Acetal resin
		Load force: 250 g
		Sliding length: 35 mm
		Writing speed: 300 mm/sec.
Pen Pitting Durability	>10 ⁶ times	End shape:R0.8mm
		Material of Pen: Poly-Acetal resin
		Load force: 250 g
		Frequency: 5 Hz
		By PA stylus tapping at same points
Finger knocking Durability	>10 ⁶ times	End shape:R8mm, Hardness:50-600
		Load force: 250 g
		Frequency: 5 Hz
		By Silicon rubber tapping at same points