

ITO Film

The touch panel have appeared in 1980's.

A quarter of century has been passed since then, and it is equipped as our familier input device in a wide range of areas in recent years. And one of core techniques for the touch panel is **thin-film techniques**.

Making full use of sputtering device, Gunze produces ITO films for various uses.

ITO Films ~ Example by film type ~

		For Matrix	Normal	Hight Transmission	Hight-Input Durability	Hight Transmission + Hight-Input Durability	Optical Isotropy Film	Phase Difference λ/4Film	NOTE
Touch Panel Type		Matrix	AnalogF-G	AnalogF-G	AnalogF-G	AnalogF-G	Linear-polarizer	Circular-polarizer	
Hard Coat	Input side	AG	AG	AG	AG	AG	AG	AG	
	ITO side	Clear	ANR	ANR	Hight Durab ility ANR	Hight Durab ility ANR	ANR	ANR	
PET Film Thickness		188um	188um	188um	188um	188um	100um	100um	
Transmission factor (Transparency)	Typ.	86%	85%	89%	84%	89%	89%	89%	JIS K7361-1
HAZE	Typ.	5%	8%	6%	17%	12%	14%	14%	JIS K7136
Sheet Resistance	Typ.	250 Ω/□	250 Ω/□	250 Ω/□	250 Ω/□	250 Ω/□	250 Ω/□	250 Ω/□	4-Point Probe
Pencil Hardness(Input side)		3H or more	3H or more	3H or more	3H or more	3H or more	N/A	N/A	JIS K5600

Numbers in the list is a value for reference, not a guaranteed value



Strong approaching to world Touch Panel Market