

ITO PET FILM

QFS-188CC-100C0

INTRODUCTION: With excellent high transmittance 81%, low haze 0.8%, QFS-188CC-100C0 is special designed for producing smart pdlc film, roll width can reach 1800mm, accept customized width and length, we're responsible for quality control.

1. Structure

PET(188um)
ITO Layer

2. Product size and performance index

NO	Item/Unit	Size And Tolerance	Test Equipment/Methods
1	Length(m)	+5/-0	Machine Automatic Measurement
2	Width(mm)	±3	Ruler
3	Thickness(um)	188±10%	Micrometer
4	Heat Shrinkage (MD, %)	≤1.5	150℃, 60 minutes (sample size: 500mm×500mm)
5	Heat Shrinkage (TD, %)	≤1.0	150℃, 60 minutes (sample size: 500mm×500mm)

Roll width: 1100mm; 1325mm; 1580mm; 1800mm

3. Appearance Quality

Under indoor lighting, 1 meter away from the ITO Film, there is no abnormal appearance such as dirt, periodic point defects, periodic scratches, etc. The cumulative allowable amount should meet the requirements of Table below:

NO	Defect	Description	Data
1	Point Defect	$\varnothing > 3.0\text{mm}$	Not Allowed
		$1.0\text{mm} < \varnothing \leq 3.0\text{mm}$	When $S \leq 1$, Allowed number: 1.0 piece /area; When $S > 1$, Allowed number: $1.0 * S$ pieces/area
		$0.5\text{mm} < \varnothing \leq 1.0\text{mm}$	Dense existence is not allowed
		$\varnothing \leq 0.5\text{mm}$	Allowed
2	Linear defect	$L \leq 30\text{mm}$ $W \leq 0.2\text{mm}$	Allowed
		Length > 30mm or width > 0.2mm and not	Allowed number: 2.0/area

		visible beyond 1 meter	
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S= ito film area

The dense existence of defects means that there are more than 5 defects in a circle with a diameter of 200mm.

4. Optical and resistance characteristics

NO	Item	Unit	Test Equipment/Methods	Data
1	Thickness	um	Micrometer	190±10%
2	Gloss	GU	JIS Z8741	≥90
3	Transmittance	%	GB/T 2410	≥81
4	Haze	%	GB/T 2410	1.0±1.0
5	B*value	-	JIS Z8722	4.5±2.0
6	Resistance	Ω/□	Four probe resistance meter	100-150

ITO Layer stability

No	Item	Method/Condition	Standard
1	High temperature and humidity	60℃、95%RH, 240 hours	Resistance change rate≤20%
2	High temperature test	80℃, 240 hours	Resistance change rate≤20%
3	Low temperature test	-40℃, 240 hours	Resistance change rate≤20%
4	ITO surface adhesion	100/100	3M 610 tape