

G907100 Refractive Index Matched ITO Coated PET Films

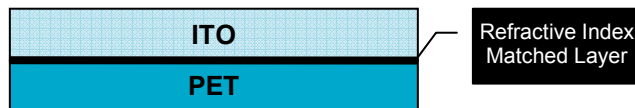
Description

Multek's SHELDAHL brand ITO coated films provide patterned ITO that is virtually invisible when used in projective capacitive touch screen applications. This refractive index match ITO coated film is available in both patterned and un-patterned formats. Multek can provide an optical solution for specialty customer applications upon request.

Features

- High stability, optically clear PET films.
- Precision refractive index matched coatings designed for ITO pattern hiding for a range of ITO resistances and film thicknesses.
- Uniform ITO coating with superb light transmission and color properties.
- Film is ready to be used as received. No heating or baking required.
- High volume roll to roll process.
- Product provided in wide roll widths
- Specialty protection films, adhesive and hard coats available as custom options.

Construction



- **Film Thickness:** 2, 5, and 7 mil (50, 125, 175 μm) optically clear heat stabilized PET films.
- **ITO Resistance Offered:** 270 Ω/\square standard. No heating or baking required.
- **Product Format:** Available as rolls or sheets with protection film applied to one or both sides, with optically clear PSA, and with ITO patterning as product options.
- **Un-patterned Width:** Master rolls are 1320mm (52") wide on 6" ID plastic cores. We will custom slit the master roll or sheet to your specification.
- **Patterned Width:** Standard roll widths are to 330mm (13") wide, and 435mm (17.125") on 6" ID plastic cores.

Product Offering

270ohm/ \square	2mil	5mil	7mil
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Quality

Multek's SHELDAHL brand materials have been an industry leader in the coating of flexible films for over 50 years. Multek products are manufactured using quality systems that conform to ISO9001 and TS-16949 quality standards. Key product characteristic are tested and monitored in accordance to applicable industry and strict internal standards. Certifications are available with product shipments.

Ordering Information

When ordering please specify:

- Film thickness
- Product roll width
- Patterning schematic and/or appropriate CAD file.
- Confirm OCA compatibility with ITO.
- Applicable custom requirements.

Shelf Life and Storage

Shelf life is approximately one year when kept at ambient conditions of 21°C and 50% RH in original unopened container.

Contact Information

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Typical Product Characteristics

Table I

Characteristics & Performance	Test Method	ITO Coated Film with Pattern Hiding	
Nominal Surface Resistivity (Ohms/Sq) of Master Roll	Q000322	270 ohm/sq ± 30 ohms/sq avg. Individual readings can be ± 40 ohm/sq. (Higher than nominal is available)	
Adhesion	ASTM D 3359 Method B	5B	
%T@550nm	Q000842	87.0 ± 1.0 avg.	
L* (in Transmission)	Q000842	>93.0 avg.	
b* Color (in Transmission)	Q000842	-2.0 to 2.0 avg.	
a* Color (in Transmission)	Q000842	-1.0 to 1.0 avg.	
%Haze	Q000842	2 mil	≤1.5 avg.
		5 and 7 mil	≤2.0 avg.
Dimensional Stability	150°C / 30min.	± 0.3%	
Flatness	Q000790	<0.4 in (10.2 mm)	

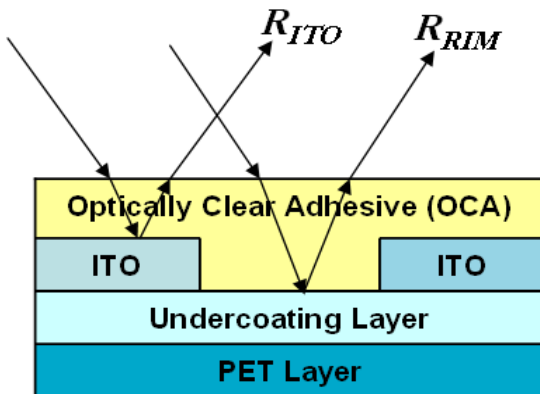


Table II

Pattern Hiding Performance	Layer Stacks of OCA/ITO/PH/PET and OCA/PH/PET
Optical Reflectance Difference between OCA/ITO/PH/PET Stack and OCA/PH/PET Stack $\Delta R = R_{ITO} - R_{RIM} $ within visible band (400 nm ~ 700 nm)	$\Delta R = R_{ITO} - R_{RIM} < 0.35\%$ avg within visible band

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