

G907100 Refractive Index Matched ITO Coated PET Films

Description

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 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 in rolls or sheets with protection film applied to one or both sides, with optically clear PSA, and with ITO patterning as product options.
- **Width:** Master rolls are 52" (1320mm) wide on 6" (152mm) ID plastic cores. We will custom slit the master roll or sheet to your specification.
- **Patterned Width:** Standard roll widths are to 13" (330mm) or 17.125" (435mm) on 6" (152mm) ID plastic cores.

Product Offering

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

Sheldahl Brand materials are manufactured using quality systems that conform to ISO9001 and TS-16949 quality standards. Key product characteristics 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 CAD file.
- Any applicable custom requirements.

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Shelf Life and Storage

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

Typical Product Characteristics

Table 1

Properties	Units	ITO Coated PET with Undercoating Layer	Test Method
Resistance	Ω/□	260	Four-Point Probe
%T @ 550nm	%	86	ASTM D1003
L* (in Transmission)	%	95	ASTM D1003
Color b* (in Transmission)		1.7	Hunter Lab
Color a* (in Transmission)		-0.25	Hunter Lab
Haze	%	1	ASTM D1003
ITO Adhesion		No removal (5B)	ASTM D 3359 Method B
Dimensional Stability (MD / TD)	%	0.15 / 0.01	150°C / 30min.

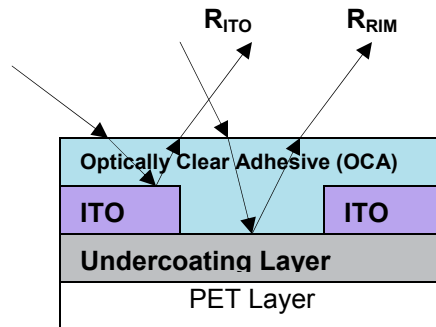


Table 2

Typical Index Match Performance	Layer Stacks of OCA/ITO/UC/PET and OCA/UC/PET
Optical Reflectance Difference between OCA/ITO/UC/PET Stack and OCA/UC/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

*The information contained herein is based upon typical data, Multek makes no warranties expressed or implied as to its accuracy and assumes no liability arising out of its use by others. The user should determine suitability of Multek materials for each individual application.