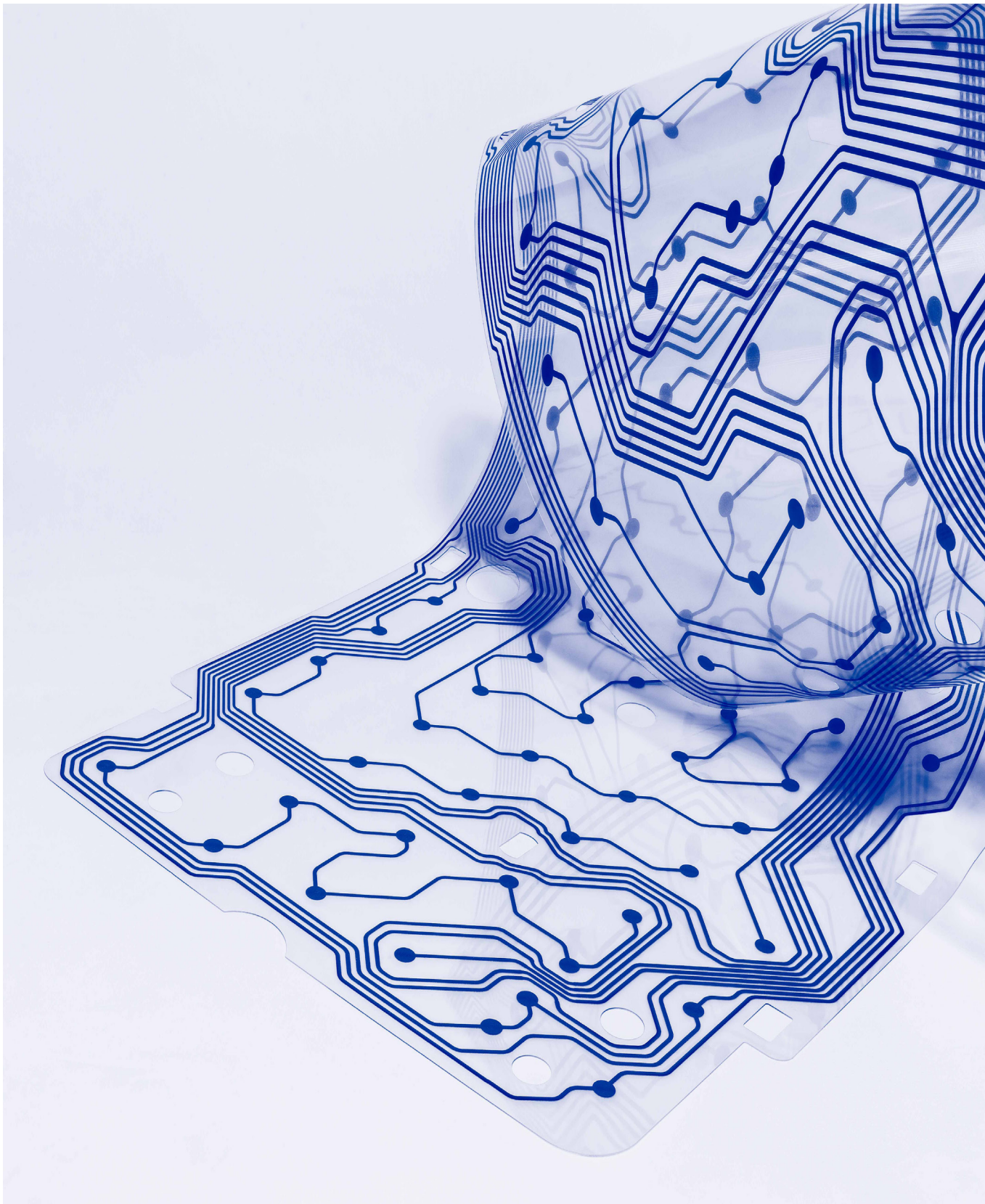




Polyester Films

for Printed and Flexible Electronics



PET and PEN Films for Flexible Electronics

Continued advances in Printed and Flexible Hybrid Electronics have required material suppliers to deliver improved functionality to the device developers in broad applications such as sensors, displays, barrier films, photovoltaics, medical diagnostics, consumer electronics, HMI (Human Machine Interface), and Flexible Printed Circuits (FPCs). We offer the widest variety and best performing range of films specifically designed for use in flexible and printed electronic applications.

Polyester Film is the optimal choice for Touch Screens, Light Collimated Films, Holographic Reflector Films, Polarizing Films, Diffusing Films, EMI Shielding Films, and Anti-Fingerprint, Anti-Scratch and Hard-coated Films. It is strong and flexible, resistant to heat, abrasion, chemicals and moisture. It has a smooth, clean surface, which is ideal for ITO sputtering or other optical coatings. It is available in thermally stabilized grades to offer superior registration and flatness. It is the material of choice for display applications requiring precise registration and dimensional control.

Flexible Printed Circuits (FPC) and Flat Flexible Cables (FFC)

- Films for copper laminates and adhesive overlays.
- Applications in automobile wiring, appliances, RFID tags, smart card leave frames and antennae.

Membrane Touch Switch (MTS)

- Films for circuit, graphics and spacer layers.
- Applications in automotive seat sensors, industrial and domestic equipment, keyboards, mobile phones.

Flexible Electronics

- Films for ITO sputtering and hard coating.
- Applications in touch screens, electroluminescent lamps, flexible displays.

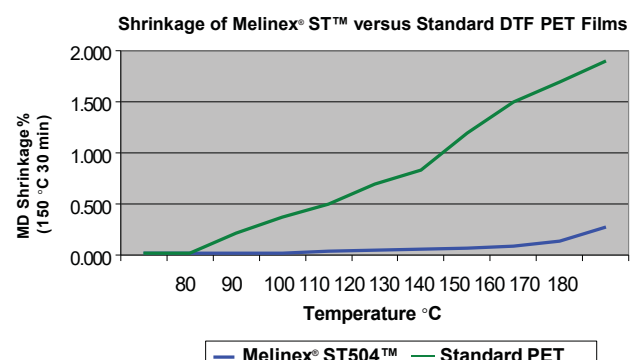
Batteries and Fuel Cells

- Films for busbar insulation, control circuits, heaters, pouches and electrical insulation.
- PolyEthylene Naphthalate (PEN) films for fuel cell gaskets.

Melinex[®] ST Films

- Predictable dimensional changes with variable heat and moisture
- Superior sheet flatness for better web handling and higher yields
- High tensile strength and stiffness to permit higher processing speeds
- Resistance to moisture and chemicals in demanding applications
- Engineered surfaces with primer systems to resolve difficult adhesion challenges

By applying a proprietary thermal stabilization technology which enables higher temperature film processing and versatility in a wide range of customer processes and applications, Melinex[®] ST[™] films widen the working temperature of PET films from approximately 185°F (85°C) to 302°F (150°C) or higher.



Film Type	Thickness Micron (gauge)	Surface Pretreat	Typical Applications
Standard films, for use when shrinkage is not critical or where film is stabilised in-house			
Mylar® A	12-500 (48-2000)	None	Strong, durable, hazy film with excellent handeability for general electronics applications.
Mylar® ADS	50-125 (200-500)	None	Lower shrinkage version of Mylar® A, suitable for FPC and MTS circuitry.
Mylar® 250	52 (205)	None	Black PET film, UV stable, improved resistance to hydrolysis
Melinex® 329	36-330 (142-1300)	None	White PET film with high opacticy for sputtering and other deposition processes.
Melinex® 339	50-330 (200-1300)	2-side adhesion	White PET film with high opacity and excellent printability and ink adhesion
Melinex® OD	125-250 (500-1000)	None	Optically clear to MTS graphics.
Melinex® 453 Melinex® 454	36-175 (142-700)	1-side adhesion 2-side adhesion	Optically clear film with excellent handling properties. Pretreated to promote adhesion to many printing inks and industrial coatings.
Melinex® 506	75-250 (300-1000)	2-side adhesion	Optically clear with excellent printability and ink adhesion
Melinex® 715 Melinex® 725	125-250 (500-1000)	1-side adhesion 2-side adhesion	Optically clear films, pretreated for excellent adhesion to UV inks and lacquers.
Melinex® 726	175 (700)	2-side adhesion	Optically clear with superb adhesion to circuitry inks for MTS applications
Melinex® TCH24UV	125 (500)	2-side adhesion	Clear, low bloom, with UV inhibitor for touch and other display applications.
Melinex® FR240 Melinex® FR241	12-50 (48-200)	None 1-side adhesion	Halogen-free, Flame Retardant (VTM-0) clear handleable film.
Melinex® FR321	75-175 (300-700)	1-side adhesion	Halogen-free, Flame Retardant (VTM-0) optically clear film
Novel Development Films			
Melinex® PCS Melinex® PCS UV	125 (500)	None	Optically clear "Peelable Clean Surface" for high barrier films. Also available with UV stability.
Melinex® D784	200,250 (800,1000)	1-side adhesion	Thermoformable PET, suitable for use in automotive, white goods, consumer electronics and In-Mould Electronics.
Kaladex® PEN Films			
Kaladex® 2000	16-100 (64-400)	None	High performance PEN film for applications where greater temperature endurance is required.
Kaladex® 2000L	25-125 (98-500)	None	High performance PEN film with optimised lower shrinkage at elevated temperatures, particularly suitable for applications in flexible circuitry and fuel cell gaskets.
Heat Stabilised optically clear films with very low shrinkage, where ultimate PET film performance is required			
Melinex® ST504	125-175 (500-700)	1-side adhesion	Optically clear with adhesion pre-treat, developed for ITO spluttering and other deposition processes.
Melinex® ST506	125-250 (500-1000)	2-side adhesion	Optically clear with excellent printability and ink adhesion suitable for MTS graphics and circuitry applications.
Melinex® ST507	50-125 (200-500)	None	Hazy film for FPC applications, ideal for use with low temperature solder reflow.
Melinex® ST725	125-250 (500-1000)	2-side adhesion	Optically clear film with excellent adhesion to industrial coatings, especially multi-pass UV curing.
Melinex® ST726	175 (700)	2-side adhesion	Optically clear with superb adhesion to circuitry inks for MTS applications.
Melinex® STCH21 Melinex® STCH22	50-100 (200-400)	1-side adhesion 2-side adhesion	Optically clear pretreated films with excellent handling properties. Developed for ITO sputtering and other deposition processes. Suitable for MTS graphics and circuitry applications.
Melinex® STCH22UV	50-100 (200-400)	2-side adhesion	Optically clear, with UV inhibitor for touch and other display applications.



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