UP TO **5x** **LONGER** CAPACITOR LIFECYCLES

NANOPLEX LDF FACTS

- **Up to 5x longer capacitor lifecycles**
- **Rated up to 135° Celsius**
- **100% US-engineered and manufactured**
- **Over 20 Global Patents**

NANOPLEX™ LDF 1400 CAPACITOR FILM

SUPERIOR HIGH TEMPERATURE PERFORMANCE

NanoPlex LDF 1400 is a development grade capacitor film designed to offer low dissipation factor performance like Biaxially Oriented Polypropylene (BOPP), only with an operational temperature rating 25 to 35 degrees Celsius higher. LDF is designed with facile film handling in mind, resulting in a product that can be metallized and wound in an equivalent manner to BOPP. The higher temperature stability projects to longer operational lifetime devices than BOPP-based capacitors.

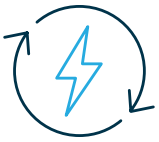
Peak Nano is scaling LDF film production for high-volume output by 2027. Samples are available upon request after a technical consultation.

Peak is the Global Leader in Nanolayered Metamaterials

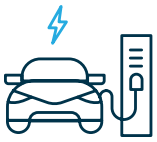
Peak Nano is the global leader in nanolayered metamaterials that are transforming capacitor performance. Our patented NanoPlex™ platform is made with advanced rheological control including the physics of flow and deformation in complex materials that enables us to precisely stack up to **4,096 nanolayers** into a single high-performance film. 100% US-engineered and manufactured, NanoPlex™ gives engineers and researchers new capabilities to advance energy, defense, and optics by replacing conventional materials with breakthrough functionality.

NANOPLEX LDF INDUSTRIES

Power Grids



Renewables



Electric Vehicles

Magnetic Fusion Systems

NANO**PLEX**™ LDF

NANOPLEX LDF 1400 SPECIFICATIONS

Property	Method	Units	Value
Dielectric Constant @ 25°C	ASTM D150	1 kHz, 25°C	2.25
Dissipation Factor @ 25°C	ASTM D150	in % at 1 kHz	0.028
Dissipation Factor @ 135°C	ASTM D150	in % at 1 kHz	0.035
Breakdown Strength @ 25°C	ASTM D149	V/µm	700
Breakdown Strength @ 135°C	ASTM D149	V/µm	655
Shrinkage MD/TD	JIS K7133	% at 130°C	2.1/0.24
Shrinkage MD/TD	JIS K7133	% at 150°C	2.8/0.44
Tensile Strength, MD/TD	ASTM D638	MPa	63/33
Young's Modulus MD/TD	ASTM D638	MPa	2300/2100
Elongation at Break MD/TD	ASTM D638	%	530/250
Coefficient of Friction (Static)	JIS K7125	roll face to air face	0.47
Coefficient of Friction (Dynamic)	JIS K7125	roll face to air face	0.38

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