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50mm Dia. XP-NIR Commercial Grade NIR Polarizing Film



Stock **#73-349** **20+ In Stock**

- 1 + A\$80⁰⁰

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Volume Pricing	
Qty 1-9	A\$80.00 each
Qty 10+	A\$64.00 each
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General

Linear Polarizer **Type:**

Note:
Delivered with protective film on both sides
Polarization axis indicated by notch cut into edge
(circular parts) or stripe on protective film
Pressure Sensitive Adhesive (PSA) on one side

Physical & Mechanical Properties

50.00 +0/-0.3 **Diameter (mm):**

0.21 +/- 0.025 **Thickness (mm):**

Polarizing Film **Construction:**

Optical Properties

Uncoated **Coating:**

>160:1 from 800-1000nm (Average, Typical) **Extinction Ratio:**

XP-NIR Polarizing Film **Substrate:** □

800 - 1000 **Wavelength Range (nm):**

>99.0 @ 860nm **Polarization Efficiency (%):**

35 +/- 3.0 @ 860nm **Transmission, Single (%):**

Environmental & Durability Factors

Heat Resistance (°C x Hours):
105C x 500h (dry) Change in single transmittance @ 870nm <+/-5%
60C x 1000h (90% humidity) Change in single transmittance @ 870nm <+/-5% from initial value, change in polarization efficiency @ 870nm <-3% from initial value

Cold Resistance (°C x Hours):
-40C x 1000h Change in single transmittance @ 870nm <+/-5% from initial value
Change in polarization efficiency @ 870nm <-3% from initial value

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 250:
Compliant

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Optimized Performance Between 800-1000nm
- Ideal for Sensing and Inspection Applications
- Available in Sizes up to 600 x 900mm
- [Near-Infrared \(NIR\) Linear Polarizing Film](#) and [High Contrast Near-Infrared \(NIR\) Polarizing Film](#) also Available for Broadband IR Applications

Commercial Grade NIR Polarizing Film (XP-NIR) offers a cost-effective solution for polarization applications in the 800-1000nm range. This film offers contrast ratios of >160:1 (Average) and >99% polarization efficiency in the specified range, and its high environmental resistance makes it a great choice for demanding environments. Commercial Grade NIR Polarizing Film (XP-NIR) is delivered with a pressure sensitive adhesive (PSA) on one side and is available in circular or rectangular sizes, with up to a 50mm diameter or a 600 x 900mm format. This film is ideal for commercial sensing, inspection, and LIDAR applications.

Note: Custom sizes available up to 1000mm

Technical Information



