

TECHSPEC® 50mm Dia. High-Temperature Linear Polarizing Film (XP40HT-40)



High-Temperature Linear Polarizing Film (XP40HT)

Stock **#29-478** **20+ In Stock**

⊖ 1 ⊕ **\$46⁰⁰**

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Volume Pricing	
Qty 1-10	\$46.90 each
Qty 11-25	\$37.52 each
Need More?	Request Quote

Product Downloads

General

Linear Polarizer **Type:**

Note:
Polarization axis is parallel to notch on polarizer edge

Physical & Mechanical Properties

50.00 +0.0/-0.5 **Diameter (mm):**

Thickness (mm):

0.40 ±0.05

Polarizing Film **Construction:**

Optical Properties

Coating:
Uncoated, Protective Film on Both Sides

Extinction Ratio:
5000:1

Substrate:
[Polymer Film XP40HT-40](#)

Transmission (%):
Single: 40 ±2
Parallel: 32.2
Crossed: <0.005

Wavelength Range (nm):
400 - 700

Polarization Efficiency (%):
>99.5

Transmission, Single (%):
40 ±2

Transmission, Parallel (%):
32.2

Transmission, Crossed (%):
<0.005

Transmission Variance after 1000 Hours (%):
<±10

Environmental & Durability Factors

Heat Resistance (°C x Hours):
100 x 1,000

Cold Resistance (°C x Hours):
-40 x 1,000

Humidity Resistance (°C x Hours):
80 x 90% RH x 1,000

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Certificate of Conformance:
[View](#)

Reach 235:
[Compliant](#)

Product Details

- High-Temperature Resistance Compared with Common Polarizing Films
- Extinction Ratio of 5000:1
- High Transmission of Unpolarized Light from 400 - 700nm
- Custom Sizes Available

TECHSPEC® High-Temperature Linear Polarizing Film (XP40HT) provides a significantly better temperature resistance of 100°C over 1000 hours compared to [common linear polarizing films](#). These polarizers feature a high extinction ratio, excellent polarization efficiency, and exceptional transmission in the visible spectrum from 400 to 700nm. A variety of standard sizes from 10mm dia. to 600 x 1000mm are available with custom sizes available on request. TECHSPEC High-Temperature Linear Polarizing Film (XP40HT) is especially well suited for applications where higher temperatures are unavoidable including photography using illumination systems or in harsh environments, 3D projection systems, and optical inspection systems.

Note: Remove protective liner from both surfaces before first use. Polarizer Film with adhesive available.

Immediate Custom Quotes Available

If you have a need for any round, square, or rectangular size of a TECHSPEC High-Temperature Linear Polarizing Film (XP40HT) in dimensions between 3mm and 600mm, please visit our [Polarizing Film Tool](#). We'll provide an immediate quote, and can deliver the part to your requested size in approximately 3 weeks. A full list of standard manufacturing tolerances and restrictions are listed. For fully customized polymer polarizers to your requirements, visit our [Customized Polymer Polarizers Capabilities](#) page.