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Ultra-Thin Polarizer, 1550nm, 12.5mm Dia, Single-Side AR Coated



Ultra-Thin Polarizer, Circle

Stock **#26-648** **1 In Stock**

⊖ 1 ⊕ **SS\$1,134⁰⁰**

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Volume Pricing	
Qty 1+	SS\$1,134.00 each
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Product Downloads

Physical & Mechanical Properties

12.50 +0/-0.2 **Diameter (mm):**

0.09 ± 0.025 **Thickness (mm):**

Optical Properties

Single-Side AR **Coating:**

>10,000:1 **Extinction Ratio:**

Substrate:
Sodium Silicate Glass Doped with Silver Nanoparticles

Surface Quality:
40-20

Transmission (%):
>92

Coating Specification:
Not available

Wavelength Range (nm):
1500 - 1600

Damage Threshold, By Design:
10 W/cm²

Acceptance Angle (°):
± 20°

Transmitted Wavefront Error, RMS:
<3 λ

Environmental & Durability Factors

Operating Temperature (°C):
-50 to +400

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Certificate of Conformance:
[View](#)

REACH 241:
[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

- **NEW LOWER PRICE!**
- Lightweight 90µm Thick Substrate
- >10,000:1 Extinction Ratio
- Excellent Resistance to Temperature, Chemicals, and Harsh Environments
- Range of Standard Sizes, Coatings, and Custom Options Available

Ultra-Thin Nanoparticle Polarizers are a lightweight 90µm thick alternative to traditional polarizers while providing a high transmission and an extinction ratio of >10,000:1. Constructed from sodium silicate glass substrate doped with prolate silver nanoparticles, these polarizers provide high temperature stability up to +400°C, chemical resistance, and resistance to UV radiation and bleaching. These polarizers are available uncoated, Single-Side AR coated, or Double-Side AR coated and cover wavelength ranges from 366-1600nm. Ultra-Thin Nanoparticle Polarizers design are ideal for use in telecom, medical, and aerospace applications as well as in optical isolators, polarization interferometry, and improving signal-to-noise ratio.