

830nm, $\lambda/4$ Precision Zero Order Retarder



Stock **#49-224** **4 In Stock**

S\$1,057⁰⁰

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Qty 1-5	S\$1,057.00 each
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General

Polymer Waveplate **Type:**

Physical & Mechanical Properties

10.16 **Clear Aperture CA (mm):**

25.40 **Diameter (mm):**

±0.508 Thickness Tolerance (mm):

±0.127 Dimensional Tolerance (mm):

Birefringent Polymer Stack Construction:

Optical Properties

830 Design Wavelength DWL (nm):

Polymer Film on [N-BK7](#) Substrate:

0.5 Reflection (%):

$\lambda/4$ Retardance:

40-20 Surface Quality:

$\leq \lambda/5$ @ 632.8nm Transmitted Wavefront, RMS:

$\lambda/350$ Retardance Tolerance:

1.00 Beam Deviation (arcmin):

500 W/cm² Damage Threshold, By Design:

0 Retardance Order:

Threading & Mounting

6.35 Mount Thickness (mm):

Environmental & Durability Factors

-20 to +50 Operating Temperature (°C):

Regulatory Compliance

[Compliant](#) RoHS 2015:

[View](#) Certificate of Conformance:

[Compliant](#) REACH 241:

Product Details

- $\lambda/4$ and $\lambda/2$ Retardance
- Excellent Angular Field of View
- Birefringent Polymer Stack
- High Damage Threshold of 500 W/cm²

Precision Zero Order Waveplates (Retarders) feature carefully aligned birefringent polymer sheets laminated between two precision N-BK7 windows, and are available in standard $\lambda/4$ and $\lambda/2$ options for common visible and NIR wavelengths. These polymer waveplates (retarders) offer excellent angular field of view because they are true zero-order retarders. Also, they will experience less than 1% retardance change over a $\pm 10^\circ$ angle of incidence. Each Precision Zero Order Waveplates (Retarders) is mounted in a metal ring with the fast axis clearly marked.