

[See all 18 Products in Family](#)

800nm, $\lambda/4$ Precision Zero Order Retarder



Stock #49-223 **1 In Stock**

- 1 + €755⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-5	€755,00 each
Qty 6+	€600,00 each
Need More?	Request Quote

! Prices shown are exclusive of VAT/local taxes

Product Downloads

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

800	Design Wavelength DWL (nm):
-----	-----------------------------

Polymer Film on N-BK7	Substrate: <input type="checkbox"/>
---------------------------------------	-------------------------------------

0.5	Reflection (%):
-----	-----------------

$\lambda/4$	Retardance:
-------------	-------------

40-20	Surface Quality:
-------	------------------

$\leq \lambda/5 @ 632.8\text{nm}$	Transmitted Wavefront, RMS:
-----------------------------------	-----------------------------

$\lambda/350$	Retardance Tolerance:
---------------	-----------------------

1.00	Beam Deviation (arcmin):
------	--------------------------

500 W/cm ²	Damage Threshold, By Design: <input type="checkbox"/>
-----------------------	---

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.