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25.4mm Dia, 550 – 750nm, $\lambda/4$ Achromatic Waveplate



Achromatic Waveplates
(Retarders)

Stock **#39-038** ✓ In Stock

-

1

+

\$1,075^{.90}

Qty 1-5	Qty 6+	Volume Pricing
\$1,075.90	\$933.86	Request Quote

Product Downloads

- STEP:step
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- PDF Drawing:pdf
- IGES:igs
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- EO Spec Sheet

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SPECIFICATIONS

General

Type:	Achromatic Waveplate	Configuration:	Air Spaced
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Physical & Mechanical Properties

Clear Aperture CA (mm):	>20.0	Diameter (mm):	25.40
Thickness (mm):	6.00 ± 0.2	Dimensional Tolerance (mm):	$\pm 0/-0.25$
Construction:	Crystalline	Parallelism (arcsec):	<10
Housing Tolerance (mm):	$\pm 0/-0.25$		

Optical Properties

Coating:	R_{avg} <0.75% @ 550 - 750nm	Substrate:	Crystal <div><div></div><div>Quartz and MgF₂</div></div>
Retardance:	$\lambda/4$	Surface Quality:	40-20
Transmitted Wavefront, P-V:	$< \lambda/4$ @ 632nm	Retardance Tolerance:	$\lambda/100$ @ 20°C
Coating Specification:	R_{avg} 0.75% @ 550 - 750nm	Wavelength Range (nm):	550 - 750
Damage Threshold, By Design:	>5 J/cm ² @ 1064nm, 10ns, 10Hz		

Regulatory Compliance

RoHS 2015:	Compliant	Certificate of Conformance:	View
Reach 247:	Compliant		

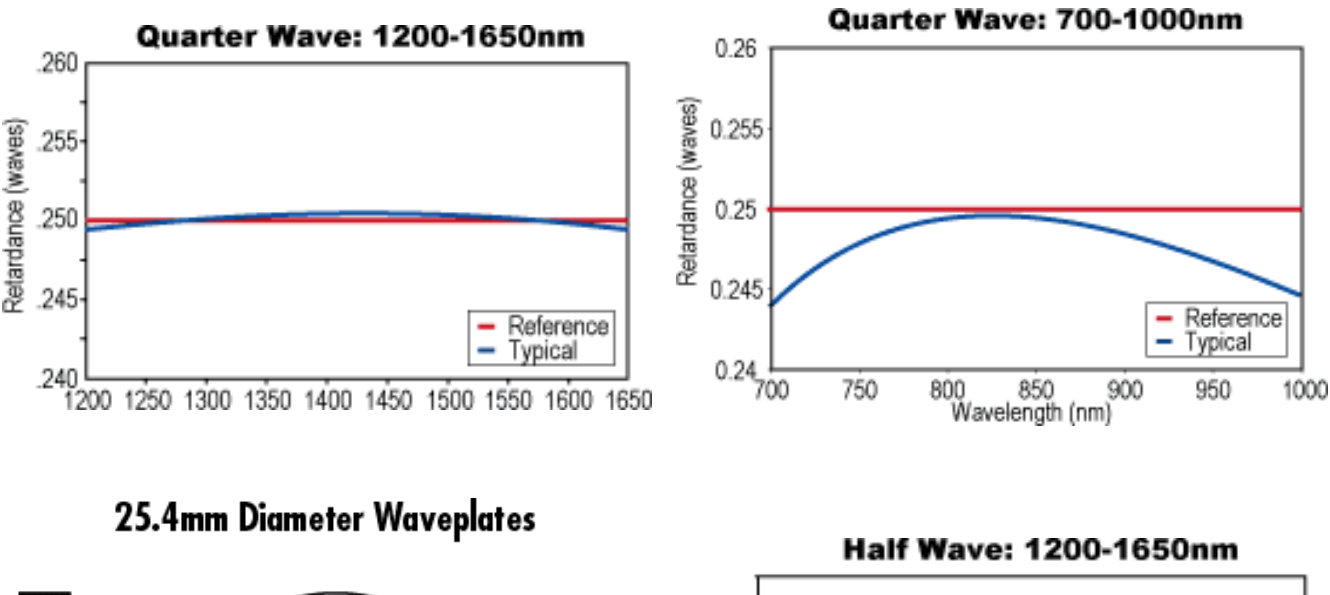
PRODUCT DETAILS

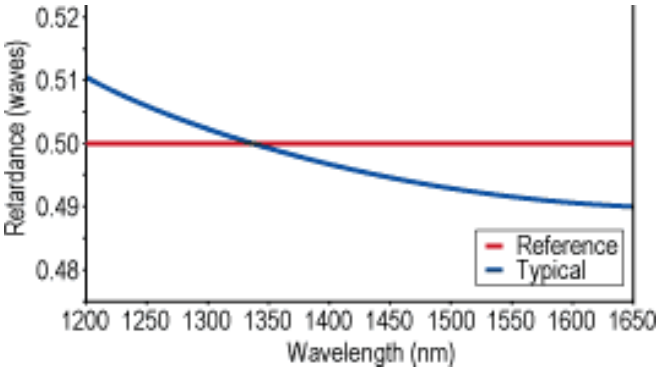
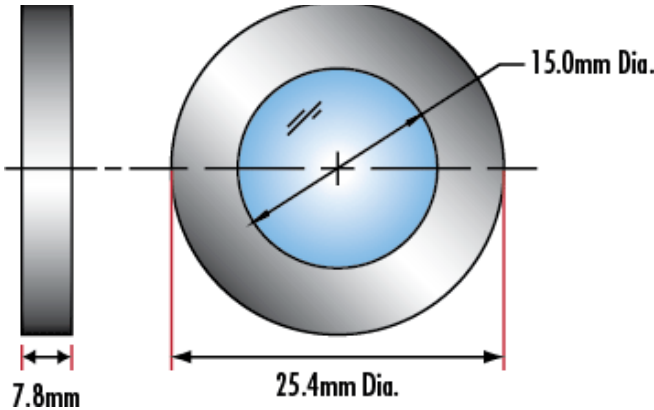
- Multiple Wavelength Ranges Available
- Flat Response Over Each Broad Spectral Range
- $\lambda/4$ and $\lambda/2$ Retardance
- Mounted in Black Anodized Aluminum Housing

Achromatic Waveplates (Retarders) provide a constant phase shift independent of the wavelength of light that is used. This wavelength independence is achieved by using two different birefringent crystalline materials. The relative shifts in retardation over the wavelength range are balanced between the two materials used. Achromatic Waveplates (Retarders), with their flat response, are ideal for use with tunable lasers, multiple laser line systems, and other broad-spectrum sources.

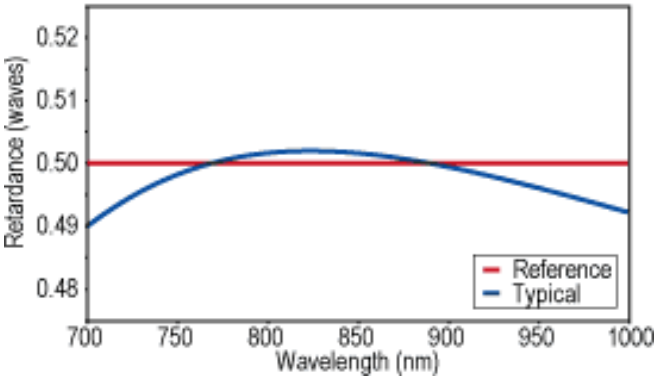
Designed to be used at an angle of incidence of 0°, changes of $\pm 3^\circ$ will yield less than 1% change in retardance. The 23mm clear aperture waveplates will feature a cemented construction. All Achromatic Waveplates (Retarders) are mounted in an anodized aluminum housing with the fast axis clearly indicated.

TECHNICAL INFORMATION

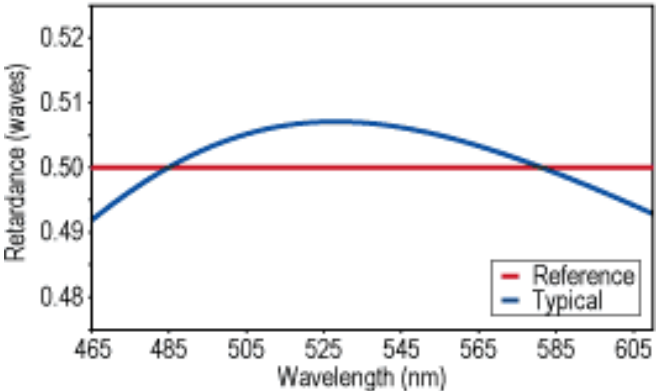




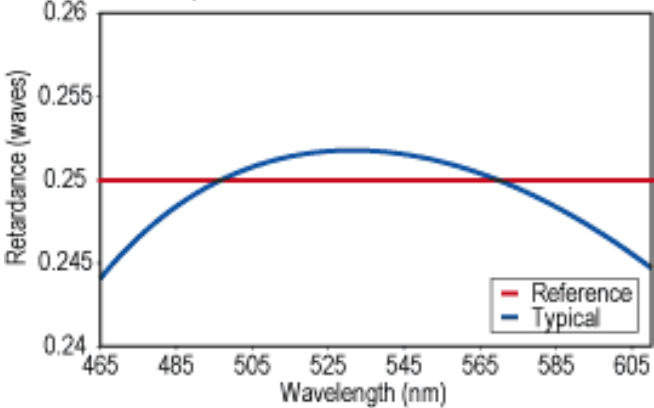
Half Wave: 700-1000nm



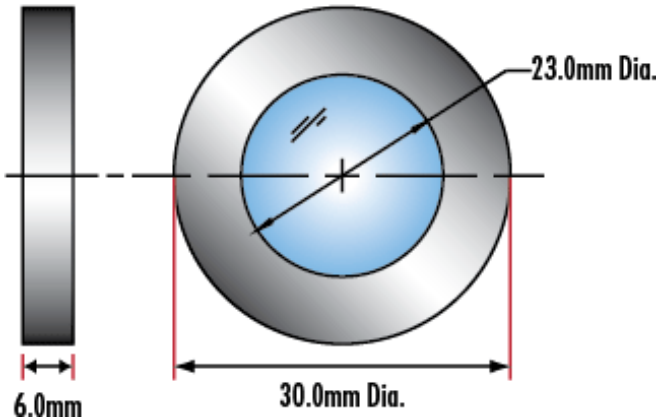
Half Wave: 465-610nm



Quarter Wave: 465-610nm



30.0mm Diameter Waveplates



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Longpass Filter**

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Media Type

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☐ Glossary term

APPLICATION

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<https://www.edmundoptics.com/p/254mm-dia-550-750nm-4-achromatic-waveplate/39600/>

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