

25.4mm Dia, 900 - 2100nm, $\lambda/2$ Achromatic Waveplate



Achromatic Waveplates (Retarders)

Stock #39-051 **2 In Stock**

1

C\$1,610^{.00}

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Volume Pricing	
Qty 1-5	C\$1,610.00 each
Qty 6+	C\$1,400.00 each
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Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	Download All

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): +0/-0.25
Construction: Crystalline	Parallelism (arcsec): <10
Housing Tolerance (mm): +0/-0.25	

Optical Properties

Coating: R _{avg} <0.75% @ 900 - 2100nm	Substrate: Crystal Quartz and MgF ₂
Retardance: $\lambda/2$	Surface Quality: 40-20
Transmitted Wavefront, P-V: < $\lambda/4$ @ 632nm	Retardance Tolerance: $\lambda/100$ @ 20°C
Coating Specification: R _{avg} <0.75% @ 900 - 2100nm	Wavelength Range (nm): 900 - 2100
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

Related Products



Metric Polarizer Mounts



Rotation Kinematic Mounts

Frequently Purchased Together



#55-010 - 25.4mm, Polarizer Mount
C\$309.40

Qty 



#33-363 - 25.0mm Dia. x 200.0mm
FL, NIR II Coated, Plano-
Convex Lens
C\$66.50

Qty 



#46-561 - 25.4mm
Dia, 700-1000nm, $\lambda/2$
Achromatic Waveplate
C\$1,484.00

Qty 

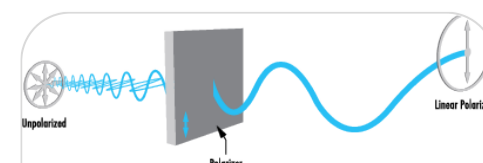


#49-872 - 25mm NIR, Polarizing
Cube Beamsplitter
C\$446.60

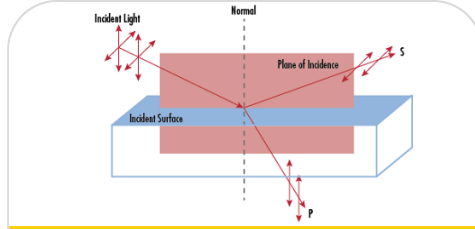
Qty 

Resources

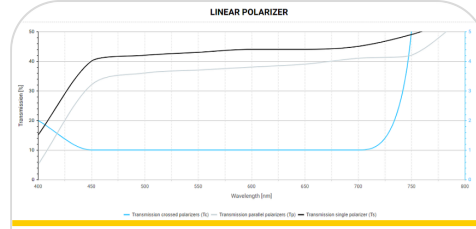
Media Type



- Application Note
- Technical Tool
- Video
- FAQ
- Glossary

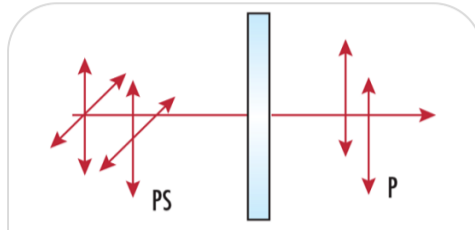


APPLICATION NOTE
Introduction to Polarization

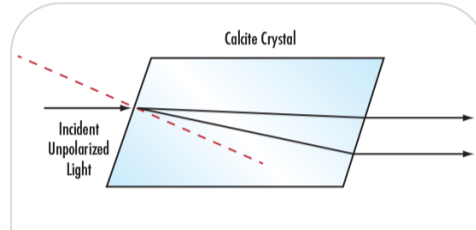


TECHNICAL TOOL
Laser-Cut Polymer Polarizer and Retarder...

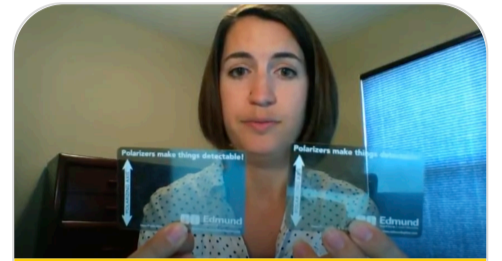
APPLICATION NOTE
Polymer Polarizers and Retarders



APPLICATION NOTE
Polarizer Selection Guide



APPLICATION NOTE
Understanding Waveplates and Retarders



VIDEO
How Do 3D Movies Work? Polarization

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