

50.8mm Dia, 650 - 1100nm, $\lambda/2$ Achromatic Waveplate



Achromatic Waveplates (Retarders)

Stock **#39-047** [CONTACT US](#)

-

1

+

£2,814⁷³

ADD TO CART

Volume Pricing	
Qty 1-5	£2,814.73 each
Qty 6+	£2,439.14 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Achromatic Waveplate

Type:

Configuration:

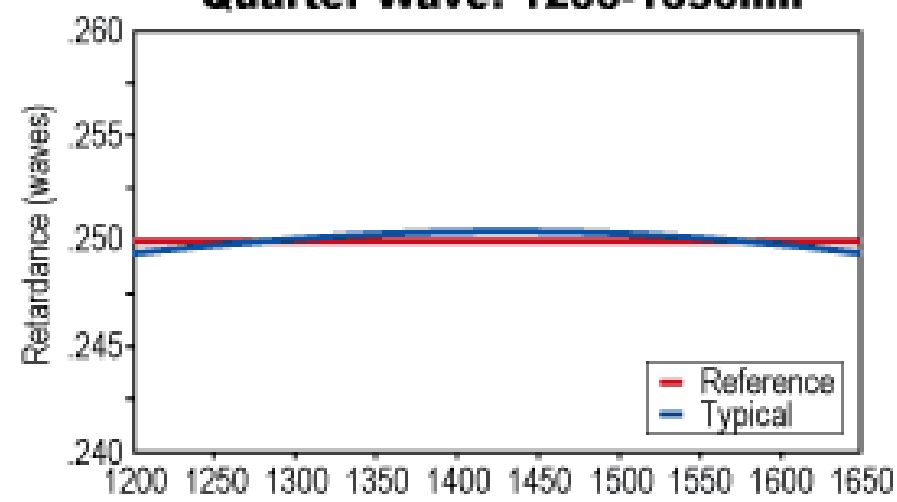
Air Spaced	
Physical & Mechanical Properties	
>34.0	Clear Aperture CA (mm):
50.80	Diameter (mm):
Thickness (mm):	
6.00 ±0.2	
Dimensional Tolerance (mm):	
+0/-0.25	
Construction:	
Crystalline	
Parallelism (arcsec):	
<10	
Housing Tolerance (mm):	
+0/-0.25	
Optical Properties	
Coating:	
R _{avg} <0.75% @ 650 - 1100nm	
Substrate: ☐	
Crystal Quartz and MgF ₂	
Retardance:	
λ/2	
Surface Quality:	
40-20	
Transmitted Wavefront, P-V:	
<λ/4 @ 632nm	
Retardance Tolerance:	
λ/100 @ 20°C	
Coating Specification:	
R _{avg} <0.75% @ 650 - 1100nm	
Wavelength Range (nm):	
650 - 1100	
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

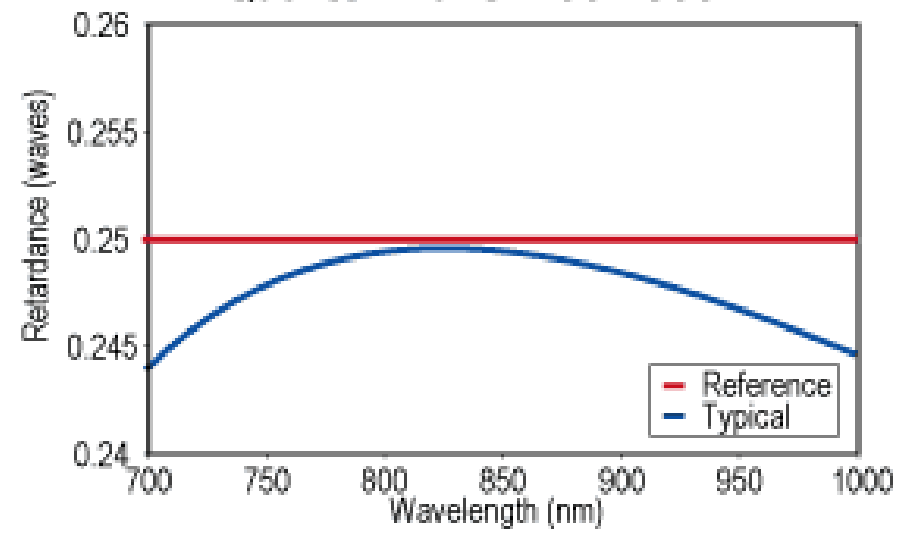
- Multiple Wavelength Ranges Available
 - Flat Response Over Each Broad Spectral Range
 - λ/4 and λ/2 Retardance
 - Mounted in Black Anodized Aluminum Housing
- Achromatic Waveplates (Retarders) provide a constant phase shift independent of the wavelength of light that is used. This wavelength independence 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 ±3° 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

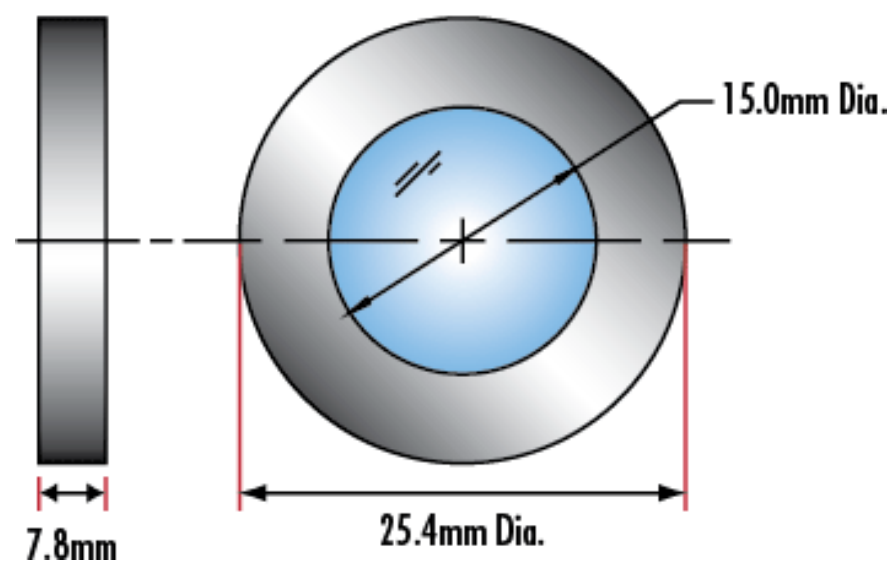
Quarter Wave: 1200-1650nm



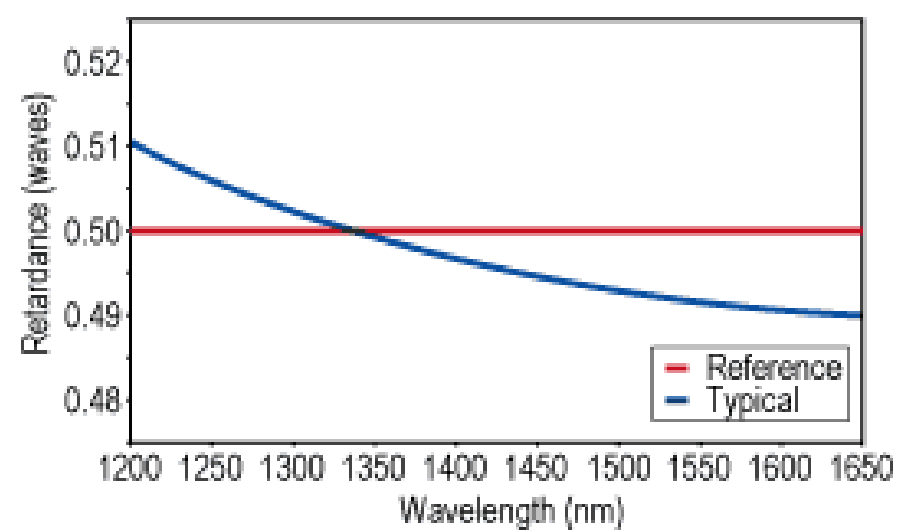
Quarter Wave: 700-1000nm



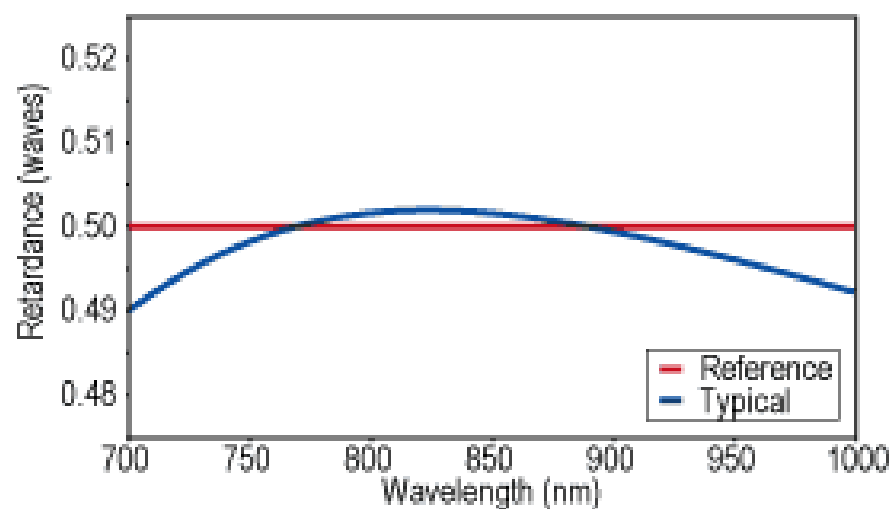
25.4mm Diameter Waveplates



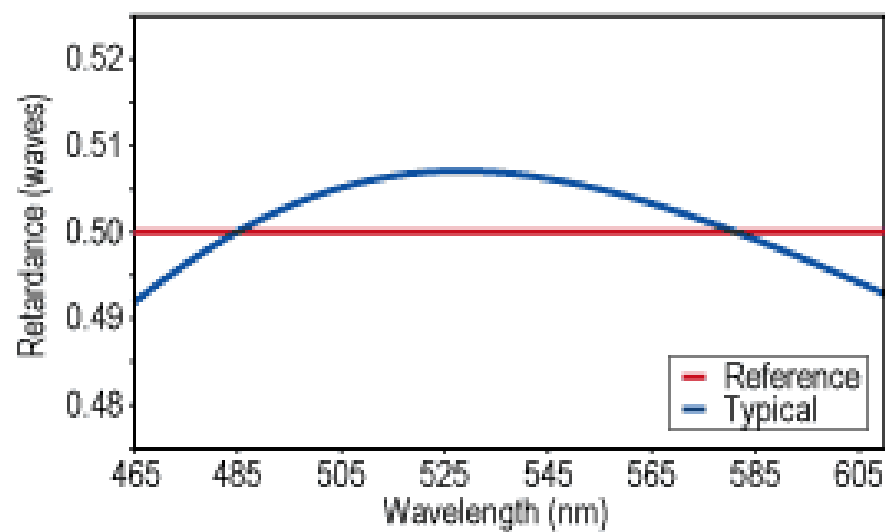
Half Wave: 1200-1650nm



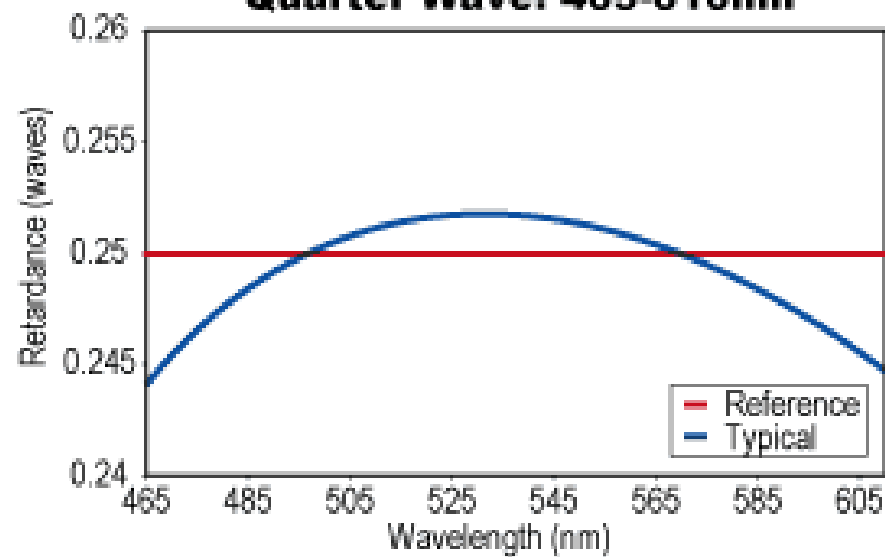
Half Wave: 700-1000nm



Half Wave: 465-610nm



Quarter Wave: 465-610nm



30.0mm Diameter Waveplates

