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25.4mm Dia., $\lambda/2$ at 800nm and $\lambda/4$ at 400nm, Dual Wavelength Waveplate



Stock #23-835 **7 In Stock**

⊖ 1 ⊕ S\$603⁴⁰

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| Qty 1-5 | S\$603.40 each |
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General

Dual Wavelength Waveplate **Type:**

Physical & Mechanical Properties

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

25.40 +0/-0.2 **Diameter (mm):**

+0/-0.2 **Dimensional Tolerance (mm):**

Parallelism (arcsec):

<30

Optical Properties

Coating:

R<0.5% @ 400 & 800nm

Design Wavelength DWL (nm):

400, 800

Substrate:

Crystalline Quartz

Retardance:

$\lambda/4$ @ 400, $\lambda/2$ @ 800

Surface Quality:

20-10

Transmitted Wavefront, P-V:

< $\lambda/10$ @ 632.8nm

Retardance Tolerance:

$\lambda/100$ @ 20 °C

Damage Threshold, By Design:

>5 J/cm² @ 1064 nm; 10 ns; 10 Hz

Retardance Order:

Multiple order

Threading & Mounting

Mount Thickness (mm):

6 ±0.2

Regulatory Compliance

RoHS 2015:

Compliant

Certificate of Conformance:

[View](#)

Reach 247:

Compliant

Product Details

- $\lambda/4$ and $\lambda/2$ Retardance for Harmonic Separation
- Designed for Nd:YAG, Yb:YAG, or Ti:Sapphire Lasers
- Multiple Order Designs

Dual-Wavelength Quartz Waveplates are made with high-quality crystalline quartz substrates and offer $\lambda/4$ retardance at one wavelength and $\lambda/2$ retardance at a second wavelength. Featuring designed wavelengths for Nd:YAG (532 and 1064nm), Yb:YAG (515 and 1030nm), and Ti:Sapphire (400 and 800nm), these waveplates boast high laser damage threshold (LDT) and anti-reflective (AR) coatings for high powered laser applications. Dual-Wavelength Quartz Waveplates are mounted in a 25.4mm black anodized aluminum ring with an 18mm clear aperture. These waveplates are ideal for laser separation applications requiring increased conversion efficiency of dual-wavelength sources or Second-Harmonic Generation (SHG) lasers through management of polarization.