

## 12.7mm Dia. 980nm $\lambda/4$ Quartz Waveplate Zero Order

#85-028



multiple order 및 zero order로 이용 가능한 Quartz Waveplates (Retarders)는 다양한 용도에 아주 적합합니다. Multiple order waveplates는 waveplate의 설계 파장 대비 파장 변화율이  $\pm 1\%$  미만인 경우에 적합합니다. 변화율이  $\pm 1\%$ 를 초과하는 용도에서는 대역폭 증가와 온도 변화에 대한 sensitivity 저하로 인해 zero order waveplates 사용을 권장합니다. 손쉬운 시스템 결합을 위해 mount 가장자리에 fast axis가 표시되어 있습니다.

## General

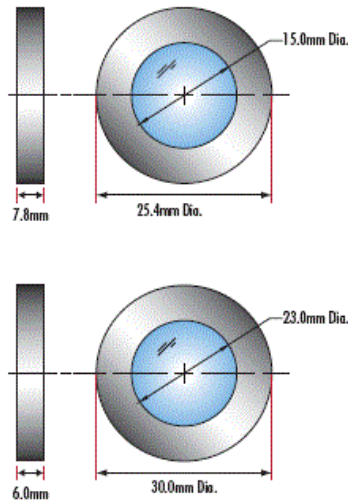
Type: Crystalline Waveplate

## Physical & Mechanical Properties

Clear Aperture CA (mm):	8.00
Diameter (mm):	12.70 +0.00/-0.25
Thickness (mm):	6.40 +0.00/-0.25
Construction:	Crystalline
Parallelism (arcsec):	<3

## Optical Properties

Coating:	Laser V-Coat (980nm)
Design Wavelength DWL (nm):	980
Substrate:	Crystal Quartz
Retardance:	$\lambda/4$
Surface Quality:	10-5
Transmitted Wavefront, P-V:	$\lambda/10$ for central 80% of clear aperture
Retardance Tolerance:	$\pm\lambda/200$
Temperature Coefficient ( $\lambda/^\circ\text{C}$ ):	0.0001
Retardance Order:	0



June 21, 2025

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

재고 번호	제품설명
85-028	12.7mm Dia. 980nm $\lambda/4$ Quartz Waveplate Zero Order

This item is EU RoHS (2015/863/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance  
 June 21, 2025

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | [Compliance@edmundoptics.com](mailto:Compliance@edmundoptics.com)



June 21, 2025

재고 번호

85-028

제품설명

12.7mm Dia. 980nm  $\lambda/4$  Quartz Waveplate Zero Order

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations



June 21, 2025

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85-028	12.7mm Dia. 980nm $\lambda/4$ Quartz Waveplate Zero Order

This item does not contain any of the substances listed on the Reach SVHC list as of 23 January 2024 in quantities exceeding 0.1% weight by weight.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts "non-hazardous" glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

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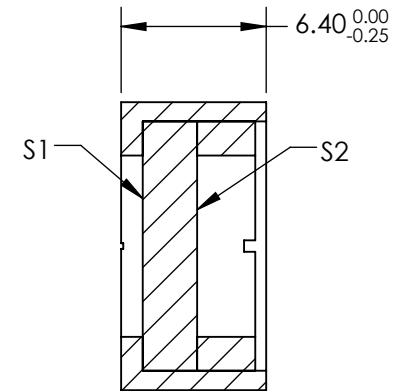
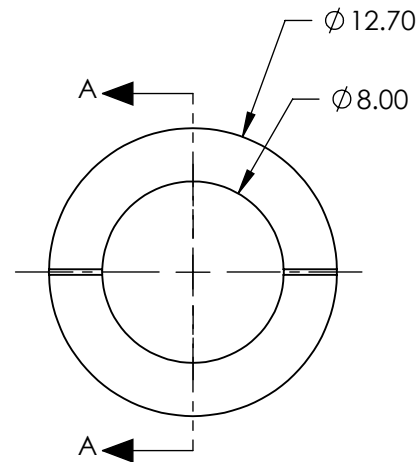
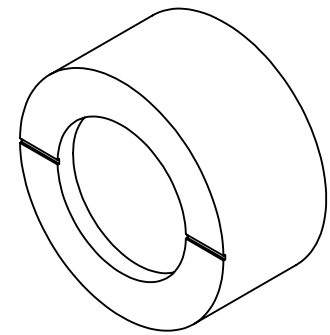
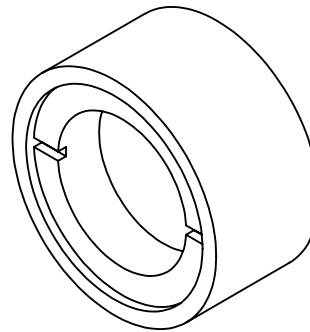


Jay Budd, Director of Corporate Compliance  
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NOTES:

1. SUBSTRATE:  
CRYSTAL QUARTZ
2. COATING (APPLY ACROSS CLEAR APERTURE)  
S1 & S2: R(abs) <0.25% @ 980nm  
DAMAGE THRESHOLD: 3.5 J/cm<sup>2</sup> @10ns @ 1064nm
3. SURFACE S1 TO BE PARALLEL TO SURFACE S2 TO WITHIN <0.5 arcsec
4. RETARDANCE:  $\lambda/4 \pm \lambda/200$
5. TRANSMITTED WAVEFRONT:  $\lambda/10$  FOR CENTRAL 80% OF CLEAR APERTURE
6. RoHS COMPLIANT

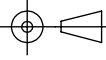


SECTION A-A

**FOR INFORMATION ONLY:  
DO NOT MANUFACTURE  
PARTS TO THIS DRAWING**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE  
DIMENSIONS ARE FOR REFERENCE ONLY

**Edmund Optics®**

	S1	S2	THIRD ANGLE PROJECTION 		TITLE	12.7mm DIA. 980nm $\lambda/4$ QUARTZ WAVEPLATE ZERO ORDER	
CLEAR APERTURE	Ø8.0	Ø8.0	ALL DIMS IN	mm	DWG NO	85028	SHEET 1 OF 1
SURFACE QUALITY	10-5	10-5					