

TECHSPEC® 50mm Diameter, 1064nm V-Coat, $\lambda/4$ N-BK7 Window

#49-154



TECHSPEC® $\lambda/4$ N-BK7 Laser Line Windows는 산업용, 그리고 low power laser 장비용으로 이상적입니다. 높은 허용 오차를 갖도록 설계되어 빔의 왜곡과 분산이 최소화됩니다. AR 코팅 처리를 할 경우 코팅 설계 파장에서 0.25% 미만의 반사율을 제공합니다.

General

Type: Laser Line Window

Physical & Mechanical Properties

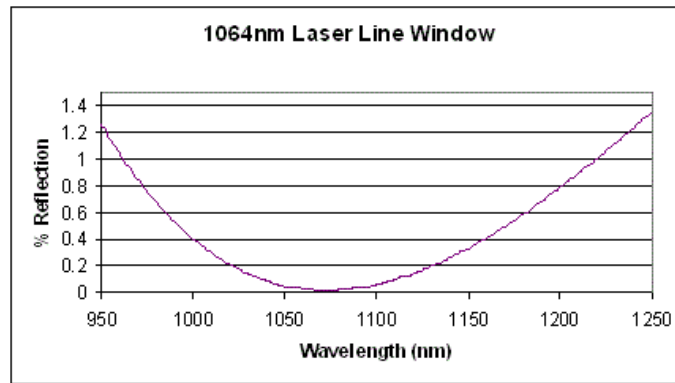
Clear Aperture CA (mm):	45.00
Diameter (mm):	50.00 +0.00/-0.25
Thickness (mm):	4.00 ±0.20
Parallelism (arcmin):	≤1
Bevel:	Protective as needed
Clear Aperture (%):	90
Edges:	Fine Ground
Poisson's Ratio:	0.206
Young's Modulus (GPa):	82
Knoop Hardness (kg/mm ²):	610

Optical Properties

Coating:	Laser V-Coat (1064nm)
Design Wavelength DWL (nm):	1064
Substrate:	N-BK7
Index of Refraction (n _d):	1.516
Surface Quality:	60-40
Abbe Number (v _d):	64.17
Coating Specification:	R _{abs} <0.25% @ 1064nm
Surface Flatness (P-V):	λ/4

Material Properties

Density (g/cm ³):	2.51
Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):	7.1 (-30 to +70°C) 8.3 (+20 to +300°C)



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
49-154	50mm Diameter, 1064nm V-Coat, $\lambda/4$ N-BK7 Window

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



June 21, 2025

재고 번호

49-154

제품설명

50mm Diameter, 1064nm V-Coat, $\lambda/4$ N-BK7 Window

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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49-154	50mm Diameter, 1064nm V-Coat, $\lambda/4$ N-BK7 Window

This item does not contain any of the substances listed on the Reach SVHC list as of 14 June 2023 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.

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

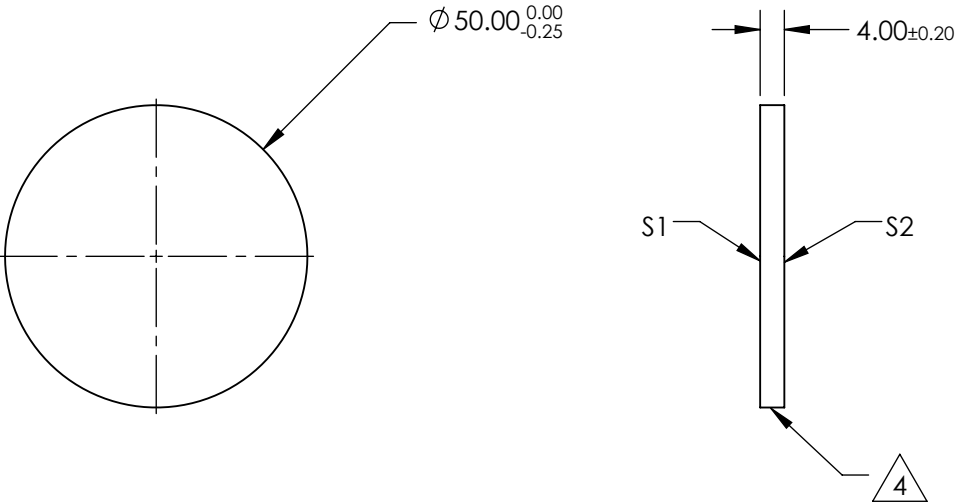
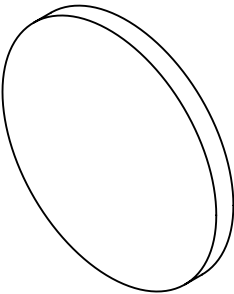
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NOTES:

- 1. SUBSTRATE:
N-BK7
- 2. S2 TO BE PARALLEL WITH S1 TO <1 arcmin
- 3. COATING (APPLY ACROSS CLEAR APERTURE)
S1 & S2: RABS <0.25% @ 1064nm

4. FINE GRIND SURFACE

5. RoHS COMPLIANT



**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	50mm DIAMETER, 1064nm V-COAT, λ/4 N-BK7 WINDOW	
SHAPE	PLANO	PLANO					
SURFACE QUALITY	60-40	60-40	ALL DIMS IN		DWG NO	49154	
BEVEL	PROTECTIVE AS NEEDED	PROTECTIVE AS NEEDED				SHEET 1 OF 1	