

TECHSPEC® 40mm Dia., 0.50 Numerical Aperture Uncoated, Aspheric Lens

#66-314



TECHSPEC® Precision Aspheric Lenses는 다이오드 레이저 출력의 포커싱을 포함하는 애플리케이션 등에서 광원으로 인한 구면 수차를 제거하여 포커싱하도록 설계되었습니다. [비구면 렌즈는 시스템의 수차를 최소화하고 렌즈의 개구수\(NA\)를 늘릴 수 있도록 합니다.](#) 뿐만 아니라 다중 요소 시스템에 사용되는 광학 요소의 수를 감소시켜 시스템의 전반적인 중량 감소와 처리량 증가, 어셈블리의 간소화 같은 각종 이점을 제공합니다.

General

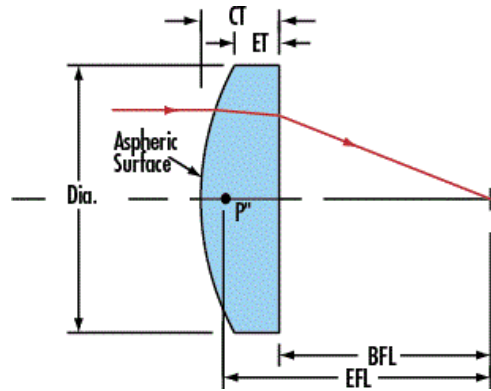
Type: Aspheric Lens

Physical & Mechanical Properties

Diameter (mm):	40.00 +0.0/-0.1
Centering (arcmin):	≤5
Clear Aperture CA (mm):	36
Edge Thickness ET (mm):	6.39
Center Thickness CT (mm):	15.50 ±0.1
Bevel:	Protective bevel as needed
Shape of Back Surface:	Convex

Optical Properties

Effective Focal Length EFL (mm):	40.00 @ 587.6nm
Numerical Aperture NA:	0.50
Back Focal Length BFL (mm):	30.68
Substrate:	L-BAL35
Aspheric Design Wavelength (nm):	587.6
Asphere Figure Error, RMS @ 632.8nm:	1.2λ
Coating:	Uncoated
Surface Quality:	60-40
f/#:	1.00
Radius R ₂ (mm):	400
Wavelength Range (nm):	330 - 2400
Conjugate Distance:	Infinite
Power (diopters):	25.00



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
66-314	40mm Dia., 0.50 Numerical Aperture Uncoated, Aspheric Lens

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



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This item does not contain any of the substances listed on the Reach SVHC list as of 8 July 2021 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.
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재고 번호

66-314

제품설명

40mm Dia., 0.50 Numerical Aperture Uncoated, Aspheric Lens

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

NOTES:

1. SUBSTRATE: L-BAL35

2. COATING

S1: NONE

S2: NONE

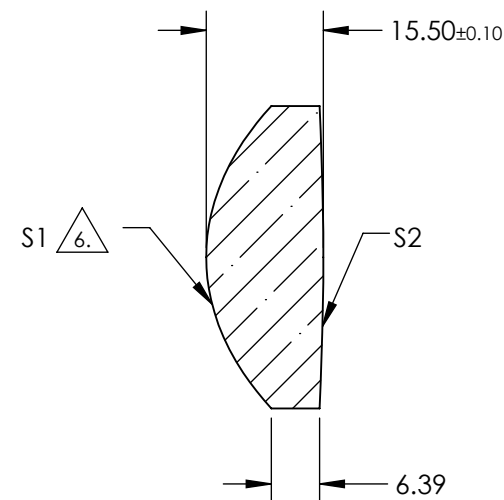
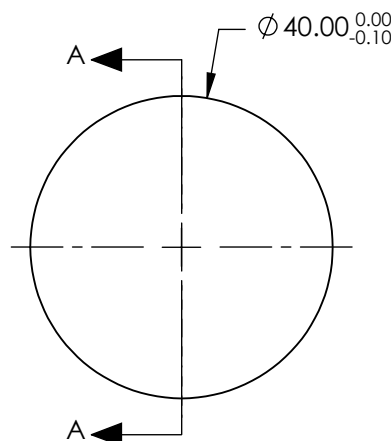
3. EDGES: FINE GROUND

4. CENTERING: 3-5 ARCMIN

5. ASPHERE FIGURE ERROR: 0.75 µm RMS

6. ASPHERIC SURFACE DESCRIBED BY (REF. COEFFICIENT TABLE)

$$Z_{ASPH}(Y) = \frac{(1/RADIUS)^2 Y^2}{1 + \sqrt{1 - (1+k) * (1/RADIUS)^2 * Y^2}} + D * Y^2 + E * Y^4 + F * Y^6 + G * Y^8 + H * Y^{10} + J * Y^{12} + L * Y^{14}$$



SECTION A-A

COEFFICIENT TABLE 6.

COEFFICIENT	S1
SEMI-DIAMETER	20.000000E+00
(1/RADIUS)	4.051737E-02
k	-6.222380E-01
D	0.000000E+00
E	0.000000E+00
F	-4.217337E-10
G	-1.489279E-12
H	0.000000E+00
J	0.000000E+00
L	0.000000E+00

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

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE DIMENSIONS ARE FOR REFERENCE ONLY

REV. A	S1	S2	EFL @587.6 : 40		 Edmund Optics®		
SHAPE	CONVEX	CONVEX	BFL @587.6 : 30.68				
RADIUS	24.681	400.00			TITLE	40mm DIA., 0.50 NUMERICAL APERTURE UNCOATED, ASPHERIC LENS	
SURFACE QUALITY	60-40	60-40					
CLEAR APERTURE	90%	90%			TITLE	40mm DIA., 0.50 NUMERICAL APERTURE UNCOATED, ASPHERIC LENS	
BEVEL MAX	PROTECTIVE AS NEEDED	PROTECTIVE AS NEEDED					
			ALL DIMS IN	mm	DWG NO	66314	SHEET 1 OF 1