

TECHSPEC® 10 x 10mm Enhanced Aluminum Coated, $\lambda/10$ ZERODUR® Mirror

#39-847



"TECHSPEC® ZERODUR® $\lambda/10$ First Surface Mirrors는 온도의 변화가 중요한 용도에 이상적으로 사용할 수 있는 제품입니다. ZERODUR® 기판은 열팽창 계수(CTE)가 $\pm 0.10 \times 10^{-6}/^{\circ}\text{C}$ 이며 대다수의 글래스 기판보다 계수의 자릿수가 낮습니다. 이 처럼 열팽창 계수가 낮으면 온도가 변화하거나 조명 광원의 강도가 바뀌더라도 미치는 일정한 반사 웨이브프론트를 가질 수 있습니다. TECHSPEC® ZERODUR® $\lambda/10$ First Surface Mirrors는 $\lambda/10$ 의 표면 평탄도와 20-10의 표면 정밀도로 미세하게 연마된 기판을 특징으로 합니다. 또한 다양한 금속 코팅 및 강화 금속 코팅을 적용할 수 있어 VIS와 IR 스펙트럼을 둘 다 필요로 하는 용도에 쉽게 결합할 수 있습니다."

General

Type: Flat Mirror

Physical & Mechanical Properties

Back Surface:	Commercial Polish
Dimensions (mm):	10.0 x 10.0 +0.00/-0.20
Bevel:	Protective bevel as needed
Clear Aperture (%):	90
Edges:	Ground
Parallelism (arcsec):	30
Thickness (mm):	2.00 ±0.20
Length (mm):	10.00
Width (mm):	10.00

Optical Properties

Surface Flatness (P-V):	$\lambda/10$
Substrate:	ZERODUR®
Surface Quality:	20-10
Coating Specification:	$R_{\text{avg}} > 95\%$ @ 450 - 650nm
Coating:	Enhanced Aluminum (450-650nm)
Coating Type:	Metal
Wavelength Range (nm):	450 - 650
Damage Threshold, Reference:	0.2 J/cm ² @ 532nm, 10ns

Material Properties

Coefficient of Thermal Expansion CTE (10⁻⁶/°C): 0.1



June 22, 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
39-847	10 x 10mm Enhanced Aluminum Coated, $\lambda/10$ ZERODUR® Mirror

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 22, 2025

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



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재고 번호	제품설명
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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 22, 2025

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This item does not contain any of the substances listed on the Reach SVHC list as of 21 January 2025 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:

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- 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 22, 2025

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NOTES:

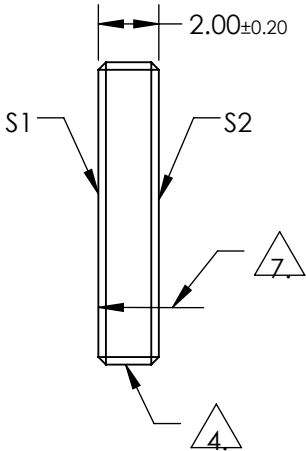
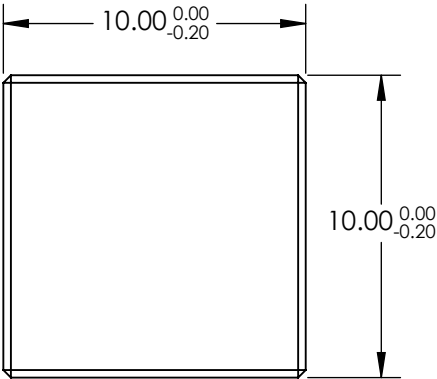
1. SUBSTRATE:
ZERODUR
2. S2 TO BE PARALLEL TO S1 TO WITHIN <30 ARCSEC
3. COATING (APPLY ACROSS COATING APERTURE)
S1: ENHANCED ALUMINUM
R(AVG) > 95% FROM 450-650nm @ 0° AOI
S2: NONE

4. FINE GROUND SURFACE

5. CLEAR APERTURE AND COATING APERTURE ARE CENTERED ON SURFACE
6. SURFACE QUALITY SPECIFICATIONS APPLY ACROSS CLEAR APERTURE

7. ARROW ON EDGE POINTS TOWARDS 1/10TH WAVE SURFACE S1

8. ROHS: COMPLIANT



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

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
DIMENSIONS ARE FOR REFERENCE ONLY

	S1	S2
SHAPE	PLANO	PLANO
SURFACE QUALITY	20-10	COMMERCIAL POLISH
SURFACE FLATNESS	0.10 WAVE	N/A
CLEAR APERTURE	9.00 x 9.00	N/A
COATING APERTURE	9.60 x 9.60	N/A
BEVEL	PROTECTIVE AS NEEDED	PROTECTIVE AS NEEDED



ALL DIMS IN

mm

Edmund Optics®

TITLE

MIRROR 1/10 WV ZDUR EN AI 10 SQ

DWG NO

39847

SHEET
1 OF 1