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TECHSPEC® 50mm Dia. 320 - 450nm Broadband V/10 ZERODUR® Mirror



Stock **#24-019** **7 In Stock**

⊖ 1 ⊕ €405⁰⁰

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Volume Pricing	
Qty 1-5	€405,00 each
Qty 6-25	€324,00 each
Qty 26-49	€304,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Flat Mirror **Type:**

Physical & Mechanical Properties

Diameter (mm):

50.00 +0.00/-0.20

Thickness (mm):

5.00 ±0.20

Back Surface:

Commercial Polish

Bevel:

Protective as needed

Clear Aperture (%):

90

Edges:

Ground

Parallelism (arcsec):

30

Optical Properties

Coating Type:

Dielectric

Coating:

Dielectric Mirror (320-450nm)

Surface Flatness (P-V):

λ/10

Wavelength Range (nm):

320 - 450

Substrate:

ZERODUR®

Angle of Incidence (°):

0-45

Coating Specification:

R_{avg} >98% @ 340 - 488nm (0°, All Polarizations)

R_{avg} >98% @ 320 - 450nm (45°, All Polarizations)

R_{avg} >99% @ 320 - 450nm (45°, S-Polarization)

Surface Quality:

20-10

Damage Threshold, By Design:

0.5 J/cm² @ 355nm, 20ns, 20Hz

Material Properties

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

0.1

Regulatory Compliance

Certificate of Conformance:

[View](#)

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- ZERODUR® Substrates Provide Near Zero Thermal Expansion
- Enhanced Reflectivity and LDT over Metallic Coatings
- UV, Visible, and NIR Reflective Coatings Designed for 0-45° AOI
- **Metallic Coated ZERODUR® Mirrors Also Available**

TECHSPEC® Broadband Dielectric ZERODUR® λ/10 Mirrors combine high reflectivity over broad wavelength ranges with a near zero coefficient of thermal expansion (CTE) making them ideal for laser applications where temperature fluctuations could impact optical performance. The ZERODUR® substrates have a coefficient of thermal expansion (CTE) of ±0.10 x 10⁻⁶/°C, which is an order of magnitude lower than most glass types, including fused silica. Featuring coatings designed for 0-45° AOI and >99% average reflectivity, these dielectric coated mirrors provide higher reflectivity than metal coated mirrors, increasing system throughput by minimizing energy loss. TECHSPEC® Broadband Dielectric ZERODUR® λ/10 Mirrors are ideal for beam steering and beam folding applications from the UV to NIR, including [fluorescence microscopy](#), flow cytometry, and [laser communications](#).

Technical Information



Compatible Mounts