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TECHSPEC® 50mm Dia. 750 - 1100nm Broadband $\lambda/10$ ZERODUR® Mirror



Stock **#24-043** **4 In Stock**

- 1 + £300⁰⁰

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Volume Pricing	
Qty 1-5	£300.80 each
Qty 6-25	£240.80 each
Qty 26-49	£226.40 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

5.00 ±0.20 **Thickness (mm):**

Commercial Polish **Back Surface:**

Protective as needed **Bevel:**

90 **Clear Aperture (%):**

Ground **Edges:**

30 **Parallelism (arcsec):**

Optical Properties

Dielectric **Coating Type:**

Dielectric Mirror (750-1100nm) **Coating:**

M10 **Surface Flatness (P-V):**

750 - 1100 **Wavelength Range (nm):**

ZERODUR® **Substrate:**

0-45 **Angle of Incidence (°):**

Coating Specification:
R_{avg} >98% @ 750 - 1100nm (0 - 45°)
R_{avg} >99% @ 750 - 1100nm (0°)

20-10 **Surface Quality:**

1 J/cm² @ 1064nm, 20ns, 20Hz **Damage Threshold, By Design:**

Material Properties

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

Regulatory Compliance

[View](#) **Certificate of Conformance:**

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® M10 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 $\pm 0.10 \times 10^{-6}/^{\circ}\text{C}$, 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® M10 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