

TECHSPEC<sup>®</sup> 50 x 50mm Protected Gold Coated, *N*/10 ZERODUR<sup>®</sup> Mirror

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Stock **#39-870** **5 In Stock**

-

1

+

S\$392<sup>00</sup>

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| Volume Pricing |                               |
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| Qty 1-5        | S\$392.00 each                |
| Qty 6-25       | S\$313.60 each                |
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Product Downloads

| General                          |                  |
|----------------------------------|------------------|
| Flat Mirror                      | Type:            |
| Physical & Mechanical Properties |                  |
| Commercial Polish                | Back Surface:    |
| 50.0 x 50.0 +0.00/-0.20          | Dimensions (mm): |

|                      |                       |
|----------------------|-----------------------|
| Protective as needed | Bevel:                |
| 90                   | Clear Aperture (%):   |
|                      |                       |
| Ground               | Edges:                |
| 30                   | Parallelism (arcsec): |
|                      |                       |
| 5.00 ±0.20           | Thickness (mm):       |
|                      |                       |
| 50.00                | Length (mm):          |
|                      |                       |
| 50.00                | Width (mm):           |

Optical Properties

|                                                                                   |                                                                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| $\lambda/10$                                                                      | Surface Flatness (P-V):                                                                                          |
|                                                                                   |                                                                                                                  |
|  | Substrate:                      |
|                                                                                   |                                                                                                                  |
| 20-10                                                                             | Surface Quality:                                                                                                 |
|                                                                                   |                                                                                                                  |
| R <sub>avg</sub> >96% @ 700 - 2000nm<br>R <sub>avg</sub> >96% @ 2000 - 10,000nm   | Coating Specification:                                                                                           |
|                                                                                   |                                                                                                                  |
| Protected Gold (700-10000nm)                                                      | Coating:                                                                                                         |
|                                                                                   |                                                                                                                  |
| Metal                                                                             | Coating Type:                                                                                                    |
|                                                                                   |                                                                                                                  |
| 700 - 10000                                                                       | Wavelength Range (nm):                                                                                           |
|                                                                                   |                                                                                                                  |
| 0.8 J/cm <sup>2</sup> @ 1064nm, 10ns                                              | Damage Threshold, Reference:  |

Material Properties

|     |                                                              |
|-----|--------------------------------------------------------------|
| 0.1 | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |
|-----|--------------------------------------------------------------|

Regulatory Compliance

|                                                                                     |                             |
|-------------------------------------------------------------------------------------|-----------------------------|
|  | RoHS 2015:                  |
|                                                                                     |                             |
|  | Certificate of Conformance: |
|                                                                                     |                             |
|  | Reach 247:                  |

## Product Details

- Precision ZERODUR® Substrates
- $\lambda/10$  Flatness
- Low Coefficient of Thermal Expansion

TECHSPEC® ZERODUR®  $\lambda/10$  First Surface Mirrors are well suited for applications where temperature fluctuation is a concern. 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. The low CTE allows these mirrors to have a consistent reflected wavefront, even when exposed to environments with varying temperature or illumination sources with changing intensity. TECHSPEC® ZERODUR®  $\lambda/10$  First Surface Mirrors feature precision polished substrates with  $\lambda/10$  flatness and 20-10 surface quality. Multiple metallic and enhanced metallic coating options are available, allowing for these mirrors to be easily integrated into applications in both the visible and infrared spectrum.

**Note:** Surface flatness is measured before coating.

## Custom

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](#).

## Compatible Mounts