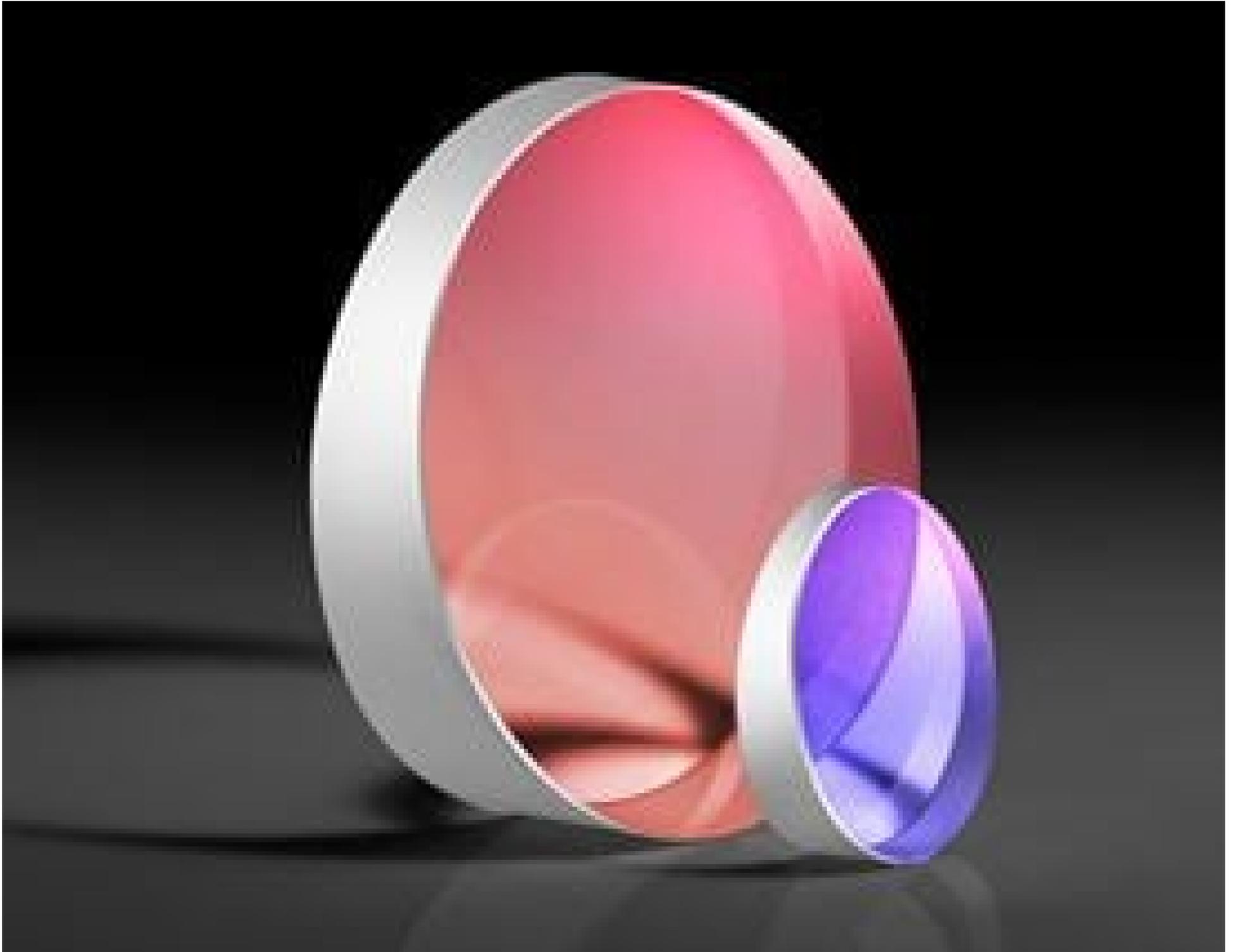


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**TECHSPEC® 12.5mm Dia. 0.5° Beam Dev. Fused Silica Wedge Prism 532nm Laser V-Coat**



TECHSPEC Fused Silica Wedge Prisms

Stock **#39-089** CLEARANCE **5 In Stock**

⊖ 1 ⊕ **\$\$145<sup>00</sup>**

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**General**

**Note:**  
Specify this is S1 & S2 power and irregularity, not the overall power of the wedge

**Physical & Mechanical Properties**

**Diameter (mm):**  
12.50

**Thickness (mm):**  
1.50

**Bevel:**  
Protective as needed

1° 3' Wedge Angle (arcmin):

## Optical Properties

30 Angle Tolerance (arcsec):

Laser V-Coat (532nm) Coating:

532 Design Wavelength DWL (nm):

Fused Silica (Corning 7980) Substrate:

20-10 Surface Quality:

Beam Deviation Image Orientation:

$R_{\text{abs}} < 0.25\%$  @ 532nm Coating Specification:

$10 \text{ J/cm}^2$  @ 532nm, 20ns, 20Hz Damage Threshold, By Design:

0.50 Power (fringes) @ 632.8nm:

0.20 Irregularity (fringes) @ 632.8nm:

0.50 Ray Deviation @ 355nm (°):

0.87 Power (diopters):

1.05° Wedge Angle (°):

## Material Properties

0.52 Coefficient of Thermal Expansion CTE ( $10^{-6}/^{\circ}\text{C}$ ):

## Regulatory Compliance

Compliant RoHS 2015:

Compliant Reach 209:

View Certificate of Conformance:

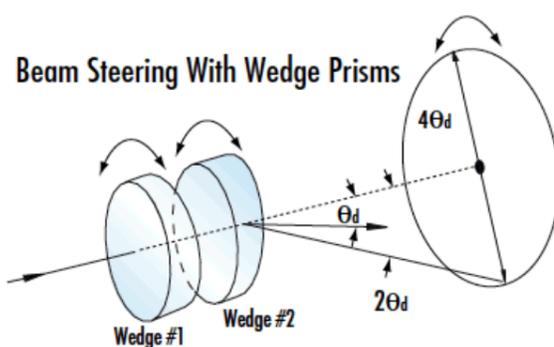
## Product Details

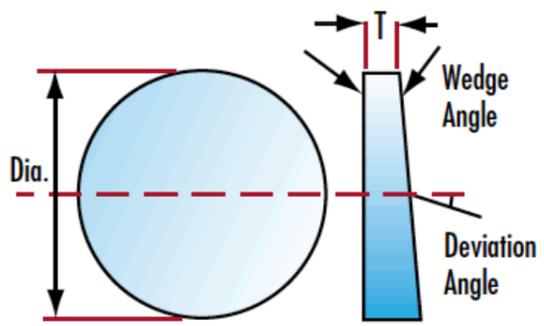
- Deviates Laser Beam Path from 0.5° - 5.0°
- Ideal for UV to NIR Beam Steering Applications from 250 to 1064nm
- Ideal for High Power Beam Steering Applications

TECHSPEC® Fused Silica Wedge Prisms are designed for a range of laser beam steering applications requiring UV-VIS or first through fourth Nd:YAG harmonic Anti-Reflection Coatings. They are optimized to ensure the highest level of system performance using tightly controlled specifications including  $\lambda/10$  surface flatness, 20-10 surface quality, and a wedge tolerance of 15 or 30 arcseconds. The Nd:YAG coated versions feature high transmittance and guaranteed laser damage thresholds specific to the design wavelength. TECHSPEC® Fused Silica Wedge Prisms utilize a wedge design to deviate laser beam path from 0.5° – 5°. By creating a risley prism pair using two wedge prisms with the same ray deviation, custom beam steering up to two times the wedge deviation is possible. A low coefficient of thermal expansion ensures accurate beam steering in high power laser applications.

**Note:** Power Diopter is defined as 1cm deviation at a distance of 1m from the prism. TECHSPEC® Wedge Prisms are also available in [N-BK7 versions](#).

## Technical Information





## 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](#).

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