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**TECHSPEC®**

**460nm, 50.8mm**

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region: European Union

Submit



Stock #26-828 **7 In Stock**

1

€331<sup>.00</sup>

ADD TO CART

Volume Pricing

Qty 1-5 €331,00 each

Qty 6-25 €320,00 each

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Prices shown are exclusive of VAT/local taxes

Product Downloads

STEP:step Curve:pdf

PDF Drawing:pdf IGES:igs

eDrawing:eprt

EO Spec Sheet [Download All](#)

General

Type: Laser Mirror

Physical & Mechanical Properties

Thickness (mm): 9.53 ±0.20

Diameter (mm): 50.80 +0.00/-0.10

Clear Aperture (%): 90

Back Surface: Commercial Polish

Parallelism (arcmin): <3

Optical Properties

Substrate: [Fused Silica](#) (Corning 7980)

Surface Quality: 10-5

Angle of Incidence (°): 45

Coating: Ultrafast (440-480nm)

Design Wavelength DWL (nm): 460

Wavelength Range (nm): 440 - 480

Surface Flatness (P-V): λ/8 over 70% CA

Coating Specification: R<sub>(avg)</sub> S & P >99.90% @ 460nm @ 45° AOI R<sub>(avg)</sub> >99.7% @ 440 - 480nm @ 45° AOI

Coating Type: Dielectric

GDD Specification: ±10 fs<sup>2</sup> @ 440 - 480nm @ 45° AOI (s-pol) ±20 fs<sup>2</sup> @ 440 - 480nm @ 45° AOI (p-pol)

Environmental & Durability Factors

**Durability:** MIL-PRF-13830B

## Regulatory Compliance

Certificate of Conformance: [View](#)

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## 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](#).

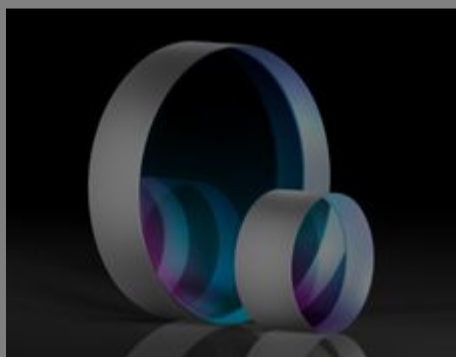
## Product Details

- GDD as Low as  $\pm 20\text{fs}^2$  at Design Wavelength Range
- Greater than 99.9% Reflectivity
- Ideal for Ti:sapphire and Yb:doped Ultrafast Lasers

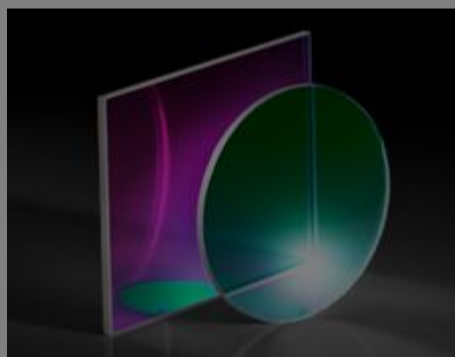
TECHSPEC® Low GDD Dielectric Ultrafast Laser Mirrors feature a multilayer dielectric coating on fused silica substrates for excellent reflectivity of greater than 99.9%, and low coefficient of thermal expansion, making them ideal for ultrafast beam transport applications. These mirrors have a group delay dispersion (GDD) of near zero at their design wavelength range, minimizing dispersion of the reflected beam. TECHSPEC® Low GDD Dielectric Ultrafast Laser Mirrors are ideal for utilizing the first and second harmonic of Ti:sapphire and Yb:doped lasers for applications such as laser machining and welding.

**Note:** Please [contact us](#) if your application requires a TECHSPEC Low GDD Ultrafast Mirror with a custom wavelength, angle, or size.

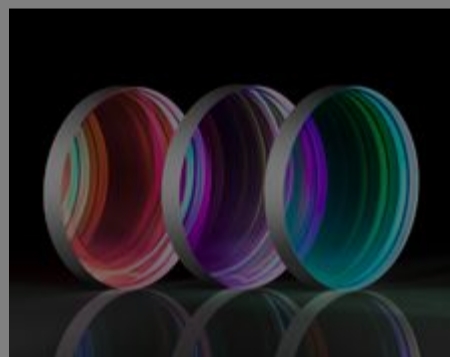
## Related Products



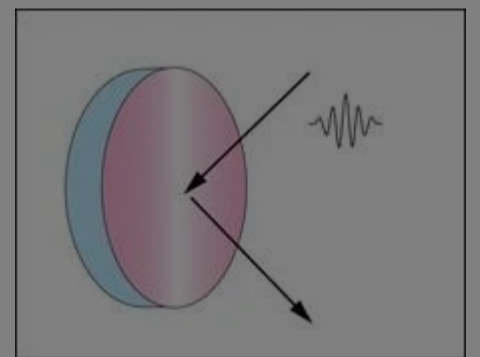
High Performance Low GDD Ultrafast Mirrors



Low GDD Dichroic Shortpass Ultrafast Filters



Ultrafast Harmonic Separators

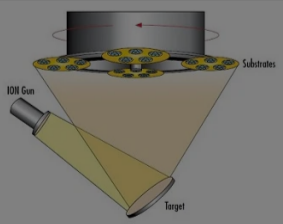


Ultrafast Laser Mirrors

## Resources

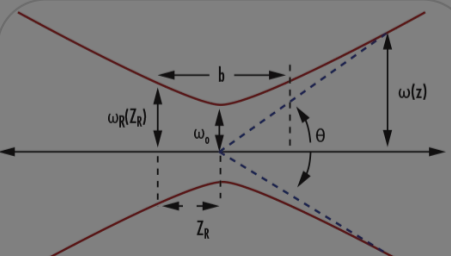
### Media Type

- Application Note
- Technical Tool
- Trending in Optics
- Video
- Published Article
- FAQ




**APPLICATION NOTE**

### An Introduction to Optical Coatings



**TECHNICAL TOOL**

### Gaussian Beams Calculator



**CASE STUDIES**

### Laser Optics for Eye Surgery

Glossary

Scientific Paper

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Effects of Laser  
Mirror Surface  
Flatness

APPLICATION NOTE

Basics of  
Ultrafast  
Lasers

APPLICATION NOTE

Highly-  
Dispersive  
Mirrors

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