

TECHSPEC® 800nm, 25.4mm Dia., 45° Ultrafast High Energy Mirror



Stock #36-409 **5 In Stock**

⊖ 1 ⊕ **\$\$449⁵⁴**

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Volume Pricing	
Qty 1-5	\$\$449.54 each
Qty 6+	\$\$395.78 each
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SPECIFICATIONS

General

Laser Mirror **Type:**

Ti:Sapphire 1st Harmonic **Typical Applications:**

Physical & Mechanical Properties

Parallelism (arcmin):

<5

Clear Aperture (%):

85

Back Surface:

Commercial Polish

Diameter (mm):

25.40 +0.00/-0.13

Thickness (mm):

9.52 ±0.25

Optical Properties

Surface Quality:

10-5

Reflection at DWL (%):

99.5

Coating Specification:

$R_{avg} \geq 99.5\%$ @ 780 - 820nm

GDD Specification:

$0 \pm 10\text{fs}^2$ @ 780 - 820nm

Wavelength Range (nm):

780 - 820

Surface Flatness (P-V):

$\lambda/6$

Coating Type:

Dielectric

Coating:

Ultrafast (780-820nm)

Design Wavelength DWL (nm):

800

Angle of Incidence (°):

45

Substrate:

[Fused Silica](#) (Corning 7980)

Damage Threshold, By Design:

0.79 J/cm² @ 800nm, 200fs FWHM, 100Hz, Linear Polarization, 1 pulse (typical)
0.7 J/cm² @ 800nm, 200fs FWHM, 100Hz, linear polarization, 1000 pulses (typical)

Regulatory Compliance

RoHS 2015:

[Compliant](#)

Reach 219:

[Compliant](#)

Certificate of Conformance:

[View](#)

PRODUCT DETAILS

- Designed with High Reflectivity for Ultrafast Beam Steering
- Ion-Beam Sputtered Coating for Low Scatter and Absorption
- GDD as Low as $0 \pm 20\text{fs}^2$ at Design Wavelength Range

TECHSPEC® High Performance Low GDD Ultrafast Mirrors are designed to have high reflectivity at 0° or 45° angles of incidence, making them ideal for ultrafast laser beam steering applications. These mirrors have a dispersion compensating coating obtained through a precision ion beam sputtering (IBS) process, providing lower scatter and absorption than traditional dielectric laser mirrors. TECHSPEC High Performance Low GDD Ultrafast Mirrors have a group delay dispersion (GDD) of near zero at their design wavelength range, minimizing dispersion of the reflected beam. Typical applications include use in the transport of femtosecond laser pulses.

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

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

