

TECHSPEC<sup>®</sup> 515nm, 50.8mm Dia. x 9.53mm Thickness, Ultrafast Laser Mirror



Stock **#25-094** 5 In Stock

-

1

+

S\$463<sup>.40</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | S\$463.40 each                |
| Qty 6-25       | S\$448.00 each                |
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Product Downloads

| General                          |                     |
|----------------------------------|---------------------|
| Laser Mirror                     | Type:               |
| Physical & Mechanical Properties |                     |
| 9.53 ±0.20                       | Thickness (mm):     |
| 50.80 +0.0/-0.1                  | Diameter (mm):      |
| 90                               | Clear Aperture (%): |

|                                                                                                                                   |                             |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Commercial Polish                                                                                                                 | Back Surface:               |
| <3                                                                                                                                | Parallelism (arcmin):       |
| Optical Properties                                                                                                                |                             |
| Fused Silica (Corning 7980)                                                                                                       | Substrate: □                |
| 10-5                                                                                                                              | Surface Quality:            |
| 45                                                                                                                                | Angle of Incidence (°):     |
| Ultrafast (500-530nm)                                                                                                             | Coating:                    |
| 515                                                                                                                               | Design Wavelength DWL (nm): |
| 480 - 530                                                                                                                         | Wavelength Range (nm):      |
| λ/8                                                                                                                               | Surface Flatness (P-V):     |
| Coating Specification:<br>R <sub>(avg)</sub> S & P >99.90% @ 515nm @ 45° AOI<br>R <sub>(avg)</sub> >99.7% @ 500 - 530nm @ 45° AOI |                             |
| Dielectric                                                                                                                        | Coating Type:               |
| GDD Specification:<br>±10 fs <sup>2</sup> @ 480 - 540nm @ 45° AOI (s-pol)<br>±20 fs <sup>2</sup> @ 500 - 530nm @ 45° AOI (p-pol)  |                             |
| Damage Threshold, Pulsed:<br>0.2 J/cm <sup>2</sup> , 150fs @ 515nm                                                                |                             |
| Environmental & Durability Factors                                                                                                |                             |
| ML-PRF-13830B                                                                                                                     | Durability:                 |
| Regulatory Compliance                                                                                                             |                             |
| View                                                                                                                              | Certificate of Conformance: |

## Product Details

- GDD as Low as ±20fs<sup>2</sup> 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.

## 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](#).