

TECHSPEC<sup>®</sup>

800-1150nm, 50.8mm Dia. x 500mm EFL, Ultrafast-Enhanced Silver Concave Mirror



TECHSPEC<sup>®</sup> Ultrafast-Enhanced Silver Concave Laser Mirrors

Stock **#17-277** 1 In Stock

-

1

+

€276<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €276,00 each                  |
| Qty 6-9        | €245,00 each                  |
| Qty 10+        | €217,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

| General                          |                |
|----------------------------------|----------------|
| Concave Mirror                   | Type:          |
| Physical & Mechanical Properties |                |
| 50.80 +0.00/-0.2                 | Diameter (mm): |

|                                                                                                                                   |                                  |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| >90                                                                                                                               | Clear Aperture (%):              |
| 10 ±0.20                                                                                                                          | Edge Thickness ET (mm):          |
| Optical Properties                                                                                                                |                                  |
| Ultrafast-Enhanced Silver                                                                                                         | Coating Type:                    |
| Ultrafast-Enhanced Silver (800-1150nm)                                                                                            | Coating:                         |
| 800 - 1150                                                                                                                        | Wavelength Range (nm):           |
| 500.00                                                                                                                            | Effective Focal Length EFL (mm): |
| Fused Silica (Corning 7980)                                                                                                       | Substrate: □                     |
| R <sub>avg</sub> >99% @ 850 - 1100nm, 0°<br>R <sub>s</sub> >99% @ 800 - 1150nm, 45°<br>R <sub>p</sub> >98.5% @ 850 - 1100nm, 45°  | Coating Specification:           |
| 20-10                                                                                                                             | Surface Quality:                 |
| 0.35 J/cm <sup>2</sup> @ 1030nm, 200fs, 1 pulse (typical)<br>0.10 J/cm <sup>2</sup> @ 1030nm, 200fs, 100Hz, 1000 pulses (typical) | Damage Threshold, Reference: □   |
| 0 ±30 fs <sup>2</sup> @ 800 - 1150nm                                                                                              | GDD Specification:               |
| 0.15λ                                                                                                                             | Irregularity (P-V) @ 632.8nm:    |
| 1,000.00                                                                                                                          | Radius of Curvature (mm):        |
| 2 Rings                                                                                                                           | Power (P-V) @ 632.8nm:           |
| Regulatory Compliance                                                                                                             |                                  |
| View                                                                                                                              | Certificate of Conformance:      |

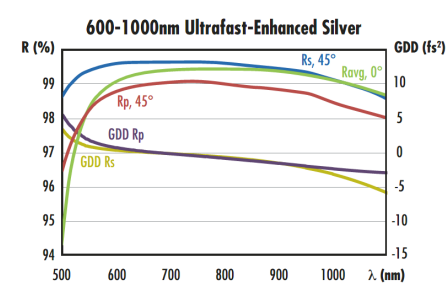
## Product Details

- Ideal for Focusing Ti:sapphire and Yb:doped Laser Pulses
- Reflectivity>99% at 600 – 1000nm or 800 – 1150nm
- Low Group Delay Dispersion as Low as 0 ±20fs<sup>2</sup>
- Effective Focal Lengths from 25 to 500mm
- **TECHSPEC® Ultrafast-Enhanced Silver Laser Mirrors** Available

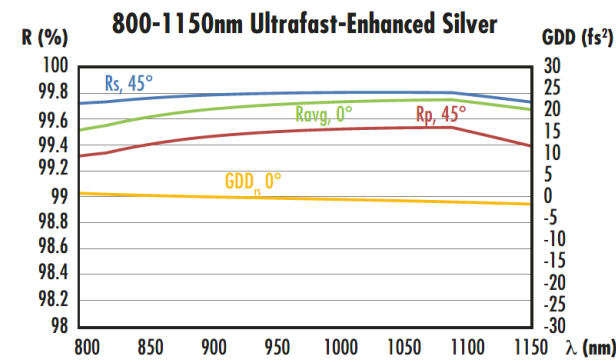
TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors feature silver coatings that are enhanced with a dielectric coating to provide increased reflectivity at 600 – 1000nm or 800 – 1150nm. These mirrors have an intrinsically low group delay dispersion (GDD) across their wavelength range, making them ideal for focusing or redirecting laser light from femtosecond lasers such as Ti:sapphire and Yb:doped lasers. Their broad wavelength range allows them to be used in applications that require a larger bandwidth than dielectric coated low GDD mirrors can provide. TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors are available in standard imperial sizes and with effective focal lengths up to 500mm.

**Note:** TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors can be designed with different wavelength ranges for other ultrafast laser types.

## Technical Information



600-1000nm Ultrafast-Enhanced Silver



800-1150nm Ultrafast-Enhanced Silver

## 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](#).