

TECHSPEC[®]

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



TECHSPEC[®] Ultrafast-Enhanced Silver Concave Laser Mirrors

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

-

1

+

C\$386^{.40}

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Volume Pricing	
Qty 1-5	C\$386.40 each
Qty 6-9	C\$343.00 each
Qty 10+	C\$303.80 each
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Product Downloads

General

Concave Mirror

Type:

Physical & Mechanical Properties

50.80 +0.00/-0.2

Diameter (mm):

Clear Aperture (%):

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

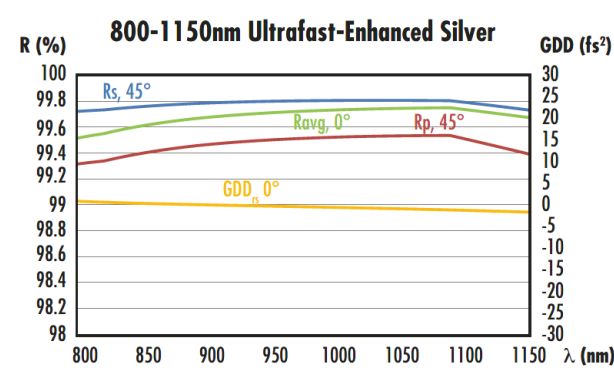
Product Details

- 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 ±20fs²
- 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



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](#).
