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12.7mm Dia. 5°, 1030nm Highly-Dispersive Ultrafast Mirror

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Stock **#12-332** **2 In Stock**

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1

+

£363²⁰

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Volume Pricing	
Qty 1-3	£363.20 each
Qty 4-7	£321.60 each
Qty 8+	£284.80 each
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Product Downloads

General	
Type:	
Laser Mirror	
Typical Applications:	
Yb:doped 1st Harmonic	
Model Number:	
HD59	

Physical & Mechanical Properties	
12.70 +0.0/-0.1	Diameter (mm):
6.35 ±0.2	Thickness (mm):
Commercial Polish	Back Surface:
80	Clear Aperture (%):
10 ±5	Wedge Angle (arcmin):
Optical Properties	
Dielectric	Coating Type:
Ultrafast (1000-1060nm)	Coating:
1000 - 1060	Wavelength Range (nm):
1030	Design Wavelength DWL (nm):
Fused Silica (Corning 7980)	Substrate: □
5	Angle of Incidence (°):
Coating Specification: R _{avg} >99.8%, GDD = -500fs ² @ 1000 - 1060nm (p-polarization) R _{abs} >99.9% @ 1030nm (typical, p-polarization)	
Damage Threshold, By Design: □ 0.3 J/cm ² @ 1030nm, 50fs, 1kHz, 100µm Beam Diameter	
99.9 (typical, p-polarization)	Reflection at DWL (%):
-500fs ² @ 1000 - 1060nm	GDD Specification:
N10	Irregularity (P-V) @ 632.8nm:
>99.8% @ 1000 - 1060nm (p-polarization)	Minimum Reflectivity:

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

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

- Highly Negative GDD up to -1000 fs² at 7° AOI
- >99.8% Minimum Reflection across 60nm Bandwidth
- Ideal for Dispersion Compensation of Yb:doped Fiber Lasers
- Ultrafast Chirped Coating

UltraFast Innovations (UFI) 1030nm Highly-Dispersive Ultrafast Mirrors are characterized by an exceptionally low GDD and high reflectance over their 60nm bandwidth due to an optimized multilayer coating. Based on dispersive optical interference, the ultrafast chirped coating provides these mirrors with a highly negative GDD of -500fs² or -1000fs² at their design angle of incidence, 5 or 7°. These mirrors feature a typical reflectance of >99.9% at their design wavelength and a minimum reflectance of 99.8% across their bandwidth. UFI 1030nm Highly-Dispersive Ultrafast Mirrors are ideal for pulse compression and dispersion compensation of Yb:doped lasers such as hybrid Mamyshev fiber and thin disk lasers. Standard imperial sizes of ½" or 1" (12.7mm or 25.4mm) are available; please contact us if your laser system requires a custom size, wavelength, or ultrashort pulses and we would be happy to find the right solution for your application.

Technical Information



