

TECHSPEC® 25.4mm Dia., 800nm T, 400nm R 0° Ti:sapphire Ultrafast Harmonic Separator



Ultrafast Harmonic Separators

Stock #22-678 **20+ In Stock**

⊖ 1 ⊕ **\$427⁰⁰**

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Volume Pricing	
Qty 1-5	\$427.00 each
Qty 6-24	\$362.60 each
Qty 25-49	\$320.60 each
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General

Harmonic Beamsplitter **Type:**

Physical & Mechanical Properties

>85 **Clear Aperture (%)**

Dichroic **Construction:**

Diameter (mm):
25.40 +0.00/-0.10

Parallelism (arcmin):
<3

Thickness (mm):
3.00 ±0.10

Optical Properties

Angle of Incidence (°):
0

Coating Specification:
Surface 1: $R_{avg} > 99\%$ @ 376 - 425nm $T_{avg} > 98\%$ @ 700 - 900nm
Surface 2: $R_{avg} < 1\%$ @ 700 - 900nm

Reflection Wavelength (nm):
400

Substrate:
[Fused Silica](#) (Corning 7980)

Surface Flatness (P-V):
 $\lambda/8$

Surface Quality:
10-5

Transmission Wavelength (nm):
800

GDD Specification:
Surface 1: $0 \pm 20 \text{fs}^2$ @ 376 - 425nm

Regulatory Compliance

Certificate of Conformance:
[View](#)

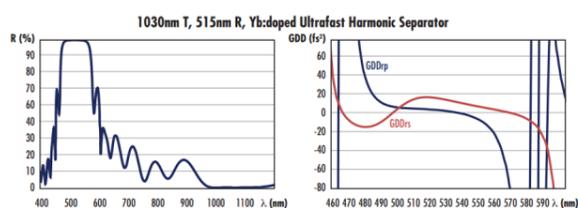
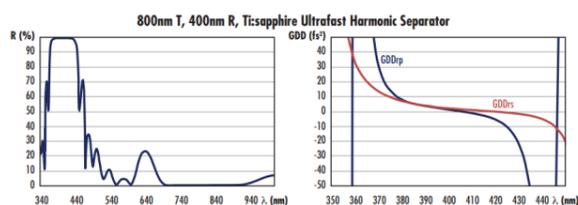
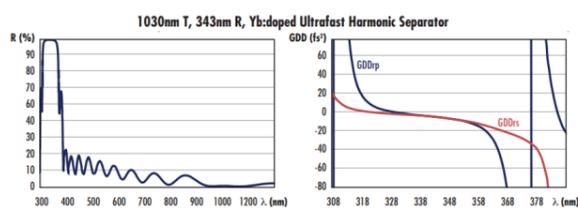
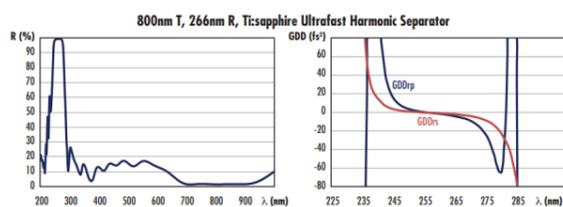
Product Details

- Separates Ultrafast Harmonic Wavelengths
- Ultrafast Beamsplitter Coating with Low GDD
- $< \lambda/10$ Wavefront Distortion
- Designs for Ti:sapphire and Yb:doped Femtosecond Lasers

TECHSPEC® Ultrafast Harmonic Separators, also known as Ultrafast Harmonic Beamsplitters, are used to reflect the second or third harmonic of femtosecond lasers while transmitting the fundamental pulse. The reflective surface is designed to have high reflectivity and a low Group Delay Dispersion (GDD) of $\pm 20 \text{fs}^2$ to minimize pulse dispersion. The back surface is coated with an anti-reflection coating to enhance the transmission of the fundamental light. TECHSPEC Ultrafast Harmonic Separators provide low wavefront distortion and feature high quality, thin UV fused silica substrates with 10-5 surface quality. Designs for separating the harmonics of 800nm and 1030nm (Ti:sapphire and Yb:doped fiber) lasers are available.

Please contact us if your application requires an Ultrafast Harmonic Separator designed for custom wavelengths.

Technical Information



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
