

**TECHSPEC® 450nm, 25mm Diameter, Low GDD Dichroic Shortpass Ultrafast Filter**



TECHSPEC® Low GDD Dichroic Shortpass Ultrafast Filters

Stock **#13-996** **1 In Stock**

⊖ 1 ⊕ **\$\$288<sup>00</sup>**

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Volume Pricing	
Qty 1-5	<b>\$\$288.40</b> each
Qty 6-25	<b>\$\$231.00</b> each
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Product Downloads

**General**

Dichroic Filter **Type:**

**Physical & Mechanical Properties**

25.00 **Diameter (mm):**

1.05 ±0.1 **Thickness (mm):**

**Dimensional Tolerance (mm):**

+0.0/-0.2

## Optical Properties

45 **Angle of Incidence (°):**

450.00 **Cut-Off Wavelength (nm):**

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

Hard Coated **Coating:**

>80 **P-Polarization Transmission (%):**

>97 Average Polarization **Reflection (%):**

470 - 545 **Reflection Wavelength (nm):**

>80 **S-Polarization Transmission (%):**

60-40 **Surface Quality:**

>85 Average Polarization **Transmission (%):**

325 - 430 **Transmission Wavelength (nm):**

$\lambda/4$  **Transmitted Wavefront, RMS:**

3.00 **Slope Factor (%):**

$\pm 2$  **Cut-Off Tolerance (%):**

>95 **S-Polarization Reflection (%):**

>95 **P-Polarization Reflection (%):**

**Coating Specification:**  
Surface 1: Hard Dielectric Sputtered Surface 2: AR Coated

325 - 545 **Wavelength Range (nm):**

**GDD Specification (Transmission):**  
80  $\pm 30\text{fs}^2$  @ 360 - 425nm  
120  $\pm 80\text{fs}^2$  @ 325 - 430nm

## 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

- Reduced Thickness for Limited GDD
- Broad Transmission and Reflection Ranges
- Ideal for Ultrafast Laser Applications
- Controlled GDD Specification Using [In-House Metrology](#)

TECHSPEC® Low GDD Dichroic Shortpass Ultrafast Filters feature thin substrates and a low group delay dispersion (GDD) coating, making them ideal for use with ultrafast laser sources. Designed for a 45° angle of incidence and covering a range of wavelengths, these spectral filters can be used with Ti:sapphire, Nd:doped, and Yb:doped fiber or glass lasers, as well as with optical parametric oscillators and amplifiers. TECHSPEC Low GDD Dichroic Shortpass Ultrafast Filters are ideal for ultrafast laser applications including multi-photon microscopy, nonlinear fluorescence, and femtosecond stimulated Raman spectroscopy. Please contact us if your application requires an ultrafast optical filter with a custom size or wavelength range.

**Note:** These filters are optimized for high spectral performance rather than high Laser Induced Damage Thresholds (LIDT). A typical LIDT for these filters is 1 J/cm<sup>2</sup> @ 532nm, 10ns. Please [contact us](#) if you require a filter with a higher LIDT value.

## Compatible Mounts

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