

**TECHSPEC® 450nm 12.5mm Diameter, OD 4.0 Shortpass Filter**



High Performance OD 4.0 Shortpass Filters

Stock #84-691 **20+ In Stock**

⊖ 1 ⊕ €199.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	€199,00 each
Qty 6-25	€159,00 each
Qty 26-49	€146,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Shortpass Filter **Type:**

Arrow on part indicates filter coated surface. **Note:**

**Physical & Mechanical Properties**

**Diameter (mm):**

12.50 +0.0/-0.2

**Thickness (mm):**

1.50 ±0.1

**Clear Aperture (%):**

>80

**Physical Durability:**

Adhesion per MIL-PRF-13830B, Section C.4.5.12  
Moderate abrasion per MIL-PRF-13830B, Section C.4.5.11  
Cleaning per MIL-C-48497A Section 4.5.4.2

## Optical Properties

**Angle of Incidence (°):**

0

**Optical Density OD (Average):**

≥4.0

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

450.00

**Substrate:**

[Fused Silica](#) (Corning 7980)

**Coating:**

Hard Coated

**Rejection Wavelength (nm):**

460 - 660

**Surface Quality:**

60-40

**Transmission (%):**

≥91

**Transmission Wavelength (nm):**

300 - 441

**Transmitted Wavefront, RMS:**

≤λ/4 @ 633nm (prior to coating)

**Slope Factor (%):**

<1

**Cut-Off Tolerance (%):**

±1

**Wavelength Range (nm):**

300 - 660

## Environmental & Durability Factors

**Environmental Durability:**

Humidity per MIL-STD-810H, Section 507.6  
Temperature per MIL-STD-810H, Section 501.7 and 502.7

## Regulatory Compliance

**RoHS 2015:**

[Compliant](#)

**Certificate of Conformance:**

[View](#)

**Reach 247:**

[Compliant](#)

## 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

- Broad Transmission and Rejection Ranges
- Sharp Slope for Effective Spectral Discrimination
- Combine with Longpass Filter for Custom Bandpass Ranges

High Performance OD 4.0 Shortpass Filters are designed with superior blocking in the rejection band while maximizing transmission in the pass band. They have a rejection band optical density of 4.0 that is combined with ≥ 91% in the pass band. This enables these filters to be ideal for a wide variety of applications. High Performance OD 4.0 Shortpass Filters can be combined with our [TECHSPEC® OD 4.0 Longpass Filters](#) to create a customized precision bandpass filter. The VS Shortpass Filter Kits include 7 filters between 400-700nm and both are ideal for integration with our filter wheels.

**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.

## Technical Information



## Compatible Mounts