

**TECHSPEC® 450nm 50mm Dia., High Performance Longpass Filter**



High Performance OD 4.0 Longpass Filters

Stock **#84-755** **2 In Stock**

⊖ 1 ⊕ €565<sup>00</sup>

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Volume Pricing	
Qty 1-5	€565,00 each
Qty 6-25	€452,00 each
Qty 26-49	€423,75 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Longpass Filter **Type:**

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

**Physical & Mechanical Properties**

**Diameter (mm):**

50.00 +0.0/-0.2

**Thickness (mm):**

5.00 ±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-On Wavelength (nm):**

450.00

**Substrate:**

Fused Silica (Corning 7980)

**Coating:**

Hard Coated

**Rejection Wavelength (nm):**

200 - 440

**Surface Quality:**

60-40

**Transmission (%):**

≥91

**Transmission Wavelength (nm):**

458 - 1650

**Transmitted Wavefront, RMS:**

≤λ/4 @ 633nm (prior to coating)

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

±1

**Slope Factor (%):**

<1

**Coating Specification:**

Surface 1: Hard Dielectric Sputtered  
Surface 2: AR Coated

**Wavelength Range (nm):**

200 - 1650

## 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

- Cut-On Slope <1%
- Rejection OD ≥ 4.0
- ≥91% Transmission in Pass Band
- Variety of [OD 4.0 Longpass Filter Kits](#) Available

TECHSPEC® High Performance OD 4.0 Longpass Filters feature high transmission in the pass band combined with superior blocking in the rejection band. Due to a rejection band optical density of 4.0 combined with >91% in the pass band, these filters are ideal for a wide variety of applications. TECHSPEC® High Performance OD 4.0 Longpass Filters are hard coated, with a hard dielectric sputtered as the first surface and AR coating as the second. Eliminate stray light by creating custom bandpass filters when combined with [TECHSPEC® High Performance Shortpass Filters](#).

**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.

TECHSPEC® Rotating Filter Wheel can be used for applications requiring a variety of filters.

## Technical Information



## Compatible Mounts