

**TECHSPEC® 975nm 50mm Dia., High Performance Longpass Filter**



High Performance OD 4.0 Longpass Filters

Stock **#86-081** **2 In Stock**

⊖ 1 ⊕ €580<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	€580,00 each
Qty 6-25	€464,00 each
Qty 26-49	€435,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ 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):**

975.00

**Substrate:**

[Fused Silica](#) (Corning 7980)

**Coating:**

Hard Coated

**Rejection Wavelength (nm):**

200 - 955

**Surface Quality:**

60-40

**Transmission (%):**

≥91

**Transmission Wavelength (nm):**

990 - 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](#)

## Product Details

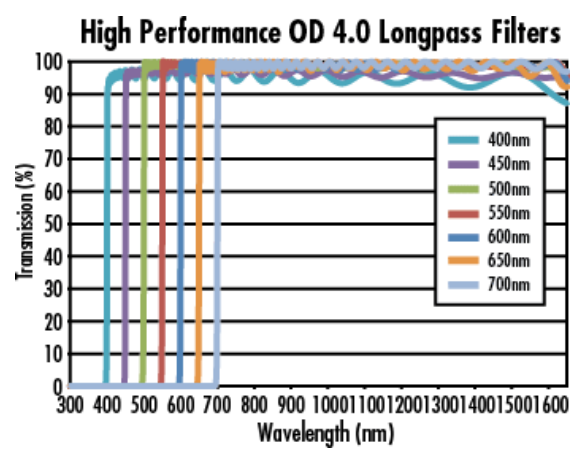
- Cut-On Slope <1%
- Rejection OD ≥ 4.0
- ≥91% Transmission in Pass Band
- Variety of [OD 4.0 Longpass Filter Kits](#) Available

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



## 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