

TECHSPEC[®] 825nm 50mm Dia., High Performance Longpass Filter



High Performance OD 4.0 Longpass Filters

Stock **#86-078** **6 In Stock**

-

1

+

S\$822⁹²

ADD TO CART

Volume Pricing	
Qty 1-5	S\$822.92 each
Qty 6-25	S\$704.93 each
Qty 26-49	S\$604.87 each
Need More?	Request Quote

Product Downloads

SPECIFICATIONS

General

Longpass Filter

Type:

Note:

Arrow on part indicates filter coated surface.

Physical & Mechanical Properties

50.00 +0.0/-0.2	Diameter (mm):
5.00 ±0.1	Thickness (mm):
>80	Clear Aperture (%):
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

0	Angle of Incidence (°):
≥4.0	Optical Density OD (Average):
825.00	Cut-On Wavelength (nm):
Fused Silica (Corning 7980)	Substrate: 
Hard Coated	Coating:
200 - 805	Rejection Wavelength (nm):
60-40	Surface Quality:
≥91	Transmission (%):
840 - 1650	Transmission Wavelength (nm):
≤λ/4 @ 633nm (prior to coating)	Transmitted Wavefront, RMS:
±1	Cut-On Tolerance (%):
<1	Slope Factor (%):
Surface 1: Hard Dielectric Sputtered Surface 2: AR Coated	Coating Specification:
200 - 1650	Wavelength Range (nm):

Environmental & Durability Factors

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

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 247:

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/cm² @ 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