

TECHSPEC® 500nm 12.5mm Diameter, OD 4.0 Shortpass Filter



High Performance OD 4.0 Shortpass Filter

Stock #84-693 **20+ In Stock**

1 C\$278^{.60}

ADD TO CART

Volume Pricing	
Qty 1-5	C\$278.60 each
Qty 6-25	C\$222.60 each
Qty 26-49	C\$204.40 each
Need More?	Request Quote

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	Download All

General

Type: Shortpass Filter	Note: Arrow on part indicates filter coated surface.
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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): 500.00	Substrate: ^① Fused Silica (Corning 7980)
Coating: Hard Coated	Rejection Wavelength (nm): 512 - 715
Surface Quality: 60-40	Transmission (%): ≥91
Transmission Wavelength (nm): 300 - 490	Transmitted Wavefront, RMS: ≤λ/4 @ 633nm (prior to coating)
Slope Factor (%): <1	Cut-Off Tolerance: ±1

(%):

Wavelength Range (nm): 300 - 715

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 $\geq 91\%$ 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 VIS 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 $1 \text{ J/cm}^2 @ 532\text{nm}, 10\text{ns}$. Please [contact us](#) if you require a filter with a higher LIDT value.

Technical Information

Related Products



Manual Cage Filter Wheel



Fixed/Multiple Filter Mounts



Cotton-Tipped Swab Applicators



OD 4.0 High Performance Shortpass and Longpass Filter Kits

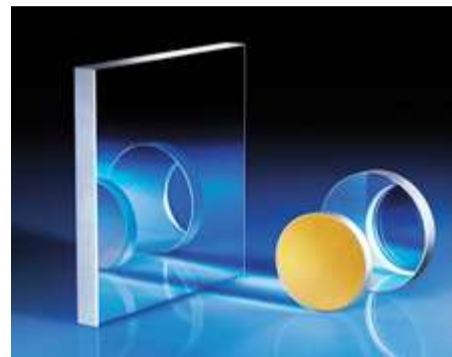
Frequently Purchased Together



#03-625 - 30mm - 50mm Length, C-Mount Fine Focus Tube
C\$165.20



#32-748 - 10.0mm Diameter, N-BK7 Ball Lens
C\$86.10








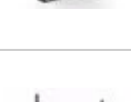















#32-942 - 12.5mm Dia Enhanced Aluminum, 4-6λ Mirror
C\$39.90



#33-329 - 550nm CWL, 12.5mm Dia, 93nm Bandwidth, OD 6 Fluorescence Filter
C\$397.60

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	12.5/12.7mm Optic Dia., SM05 Thin Mount, M4	Fixed		#13-789	C\$27.30 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	12.5/12.7mm Optic Dia., SM05 Thin Mount, 8-32	Fixed		#13-790	C\$27.30 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	12.5/12.7mm Optic Dia., L-Slot Direct Mount	Fixed		#36-416	C\$82.60 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	12.5/12.7mm Optic Dia., Side Flange Direct Mount	Fixed		#36-418	C\$82.60 Request Quote	11 In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	12.5/12.7mm Optic Dia., L-Slot and Rotation Direct Mount	Adjustable - Rotary		#36-417	C\$135.10 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-529	C\$142.80 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	7.0 - 40.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-676	C\$148.40 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>
MORE+ 	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	C\$151.20 Request Quote	CONTACT US <input type="text" value="1"/> <input type="button" value="🛒"/>
	7.0 - 67.0 Optic Height, English	Fixed		#03-669	C\$162.40 Request	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>


	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	Bar-Type Optic Holder				Quote	
MORE+ 	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	C\$168.00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-077	C\$219.80 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-955	C\$365.40 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+ 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	C\$574.00 Request Quote	CONTACT US <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#84-640	C\$589.40 Request Quote	7 In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-958	C\$600.60 Request Quote	5 In Stock <input type="text" value="1"/> 

Check out our full selection of mounts [here](#).

Resources

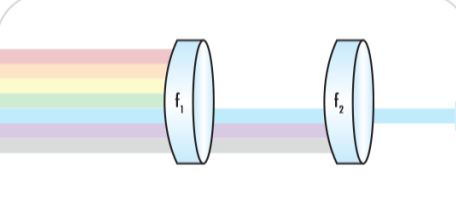
Media Type

- Application Note
- Video
- Published Article
- FAQ
- Glossary
- Trending in Optics




APPLICATION NOTE

The Importance of Optical Filter Orientation...



APPLICATION NOTE

Custom Bandpass Filter using Shortpass an...



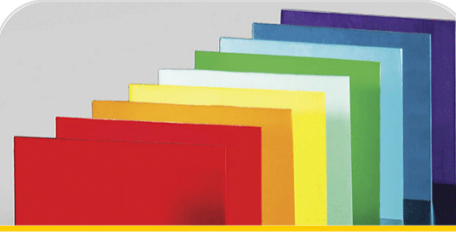
VIDEO

Optical Filters Review




VIDEO

Optical Filter Coatings: Comparison of Traditional a...



PUBLISHED ARTICLE

Selecting Color Filter Glass for Life Science Applications



FAQ

What type of material should I look for in a filter?

[View More](#)
