

TECHSPEC®

800nm CWL, 12.5mm Dia. Hard Coated OD 4.0 50nm Bandpass Filter



Stock #84-777 **20+ In Stock** [Additional Bandwidths](#)

1 **£164^{.00}**

ADD TO CART

Volume Pricing	
Qty 1-5	£164.00 each
Qty 6-25	£131.20 each
Qty 26-49	£123.00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- IGES:igs
- eDrawing:eprt
- EO Spec Sheet
- [Download All](#)

General

Type:	Bandpass Filter	Typical Applications:	ICG, IRDye800RS, Alexa Fluor® 790
Typical Light Sources:	780nm Laser		

Physical & Mechanical Properties

Diameter (mm):	12.50 +0.0/-0.1	Clear Aperture CA (mm):	8.5
Construction:	Mounted in Black Anodized Ring	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
Substrate Thickness (mm):	3.5 ±0.5		

Optical Properties

Angle of Incidence (°):	0	Bandwidth (nm):	45
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Optical Density OD (Average):	≥4.0	Center Wavelength CWL (nm):	800.00
Full Width-Half Max FWHM (nm):	50.00	Substrate: ⓘ	Optical Glass
Minimum Transmission (%):	≥90	Coating:	Hard Coated
Surface Quality:	80-50	Blocking Wavelength Range (nm):	200 - 1200

Threading & Mounting

Mount Thickness (mm): 5.0 ±0.1

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

- High Transmission, Deep Blocking
- Broad Bandwidths Ideal for Imaging Applications
- Available in VIS and IR Center Wavelengths
- **Hard Coated OD 4.0 10nm** and **25nm** Bandpass Filters Also Available

TECHSPEC® Hard Coated OD 4.0 50nm Bandpass Filters are ideal for imaging applications, including machine vision inspection, fluorescence microscopy, and a variety of biotech instrumentation. These bandpass filters eliminate unwanted background noise and enhance the signal-to-noise ratio within imaging applications. Unlike traditional filters, these hard coated filters are fabricated using only a single substrate. TECHSPEC® Hard Coated OD 4.0 50nm Bandpass Filters offer deeper blocking, higher transmission, and steeper slopes than traditional coated filters. Hard Coated OD 4.0 **10nm** and **25nm** are also available.

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.

Technical Information

All mounted TECHSPEC® Optical Filters have an arrow on the side of the mount that points to the filter-coated surface for quick reference. Filter oriented such that arrow points to filter coated surface S1. Anti-reflective (AR) coating is applied to S2.

Related Products



Manual Cage Filter Wheel



C, S, and T-Mount Circular Optic Mounts



Cotton-Tipped Swab Applicators



Hard Coated OD 4.0 25nm Bandpass Filters

Frequently Purchased Together



#03-618 - 5mm Spacer to convert CS-Mount Cameras to C-Mount
£23.20

Qty



#03-633 - 2.0mm Thick, C-Mount Brass Spacer Ring
£9.00

Qty



#33-988 - Basler ace acA1920-40gm Monochrome GigE Camera
£464.00

Qty










































#45-930 - 25mm Dia. x -25mm FL, VIS-NIR Coated, Double-Concave Lens
£44.80

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	12.5/12.7mm Optic Dia., SM05 Thin Mount, M4	Fixed		#13-789	£15.60 Request Quote	10 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., SM05 Thin Mount, 8-32	Fixed		#13-790	£15.60 Request Quote	17 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-865	£34.80 Request Quote	CONTACT US <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., L-Slot Direct Mount	Fixed		#36-416	£47.20 Request Quote	17 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., Side Flange Direct Mount	Fixed		#36-418	£47.20 Request Quote	10 In Stock <input type="text" value="1"/>
	2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-668	£50.40 Request Quote	20+ In Stock <input type="text" value="1"/>
	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	£66.40 Request Quote	20+ In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	12.5/12.7mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-850	£74.40 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., L-Slot and Rotation Direct Mount	Adjustable - Rotary		#36-417	£77.20 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Compact Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#34-720	£80.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-529	£81.60 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-853	£83.20 Request Quote	15 In Stock <input type="text" value="1"/> 
MORE+ 	7.0 - 40.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-676	£84.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	£86.40 Request Quote	CONTACT US <input type="text" value="1"/> 
MORE+ 	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	£92.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Compact Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#34-721	£93.60 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	£96.00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-077	£125.60 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-814	£128.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-817	£145.60 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-955	£208.80 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Top Adjust Kinematic Mount, Lead Screw	Adjustable - Tip-Tilt		#13-768	£216.00 Request Quote	6 In Stock <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Top Adjust Kinematic Mount, Micrometer	Adjustable - Tip-Tilt		#13-769	£231.20 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+ 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	£328.00 Request Quote	CONTACT US <input type="text" value="1"/> 
MORE+ 	12.5/12.7mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#84-640	£336.80 Request Quote	7 In Stock <input type="text" value="1"/> 

	Title	Type	Compare	Stock Number	Price	Buy
 	12.5/12.7mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-958	£343.20 Request Quote	5 In Stock <input data-bbox="1801 166 1866 219" type="text" value="1"/> 

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