

589nm CWL, 10nm FWHM, 12.5mm Mounted Diameter



Stock #65-647 [CONTACT US](#)

1 C\$147⁰⁰

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Volume Pricing	
Qty 1-9	C\$147.00 each
Qty 10-25	C\$130.20 each
Qty 26-49	C\$123.20 each
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Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	Download All

General

Type: Bandpass Filter	Typical Applications: Na He Emission Line
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Physical & Mechanical Properties

Diameter (mm): 12.50 +0.0/-0.2	Clear Aperture CA (mm): 9.0
Construction: Mounted in Black Anodized Ring	

Optical Properties

Angle of Incidence (°): 0	Optical Density OD (Average): ≥3.0
Center Wavelength CWL (nm): 589.00 ±2	Center Wavelength CWL Tolerance (nm): ±2
Full Width-Half Max FWHM (nm): 10.00 ±2	Full Width-Half Max FWHM Tolerance (nm): ±2
Minimum Transmission (%): ≥45	Coating: Traditional Coated
Surface Quality: 80-50	Blocking Wavelength Range (nm): 200 - 1200

Threading & Mounting

Mount Thickness (mm): 7.5 ±0.1	
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Environmental & Durability Factors

Operating Temperature (°C): -50 to +75

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

- Available in UV, Visible, and IR Center Wavelengths
- 10 – 80nm Bandwidths Available
- Ideal for Biomedical Applications and Instrumentation Integration
- **193-399nm**, 400-699nm, and **700-1650nm** CWL Options Available

Traditional Coated 400 – 699nm Bandpass Interference Filters are used to selectively transmit a narrow range of wavelengths while blocking all others. These filters are ideal for a range of biomedical and quantitative chemical applications. Bandpass interference filters are widely used in instrumentation for various applications, including clinical chemistry, environmental testing, colorimetry, elemental and laser line separation, flame photometry, fluorescence, and immunoassays. In addition, Traditional Coated 400 – 699nm Bandpass Interference Filters are used to select discrete spectral lines from arc or gas discharge lamps and to isolate a particular line from Ar, Kr, Nd: YAG, and other lasers. Traditional Coated 400 – 699nm Bandpass Interference Filters are often used in conjunction with [laser diode modules](#) and [LEDs](#).

Traditional Coated Filters

Traditional coated filters are fabricated in three sections, one of which determines the center wavelength (CWL), bandwidth (FWHM), and the shape of the transmittance curve while the other two control the blocking range of the filter. The bandpass section of Traditional Coated Bandpass Interference Filters is made by repetitive vacuum deposition of thin layers of partially reflecting dielectric compounds on a glass substrate. Rejection of wavelengths resulting from destructive interference is limited to within 15% of the central wavelength, therefore, additional glass or metallic blockers must be added to reduce out-of-band transmittance. Metallic blockers, such as layers of silver, reflect and absorb radiation outside of the filter passband and negate higher order passbands from X-ray to the long-wave infrared (LWIR). The blocking capabilities of metallic blockers are augmented by the addition of color transmitting glass and custom dyes that absorb UV or long wavelength radiation. After thin film deposition is complete, the three sections are scribed, laminated, cut, and mounted.

Technical Information

Frequently Purchased Together



#62-119 - 766nm CWL, 10nm FWHM, 12.7mm Mounted Diameter
C\$25.43



#65-077 - 436nm CWL, 12.5mm Dia., Hard Coated OD 4.0 10nm Bandpass Filter
C\$260.40










































#65-093 - 520nm CWL, 12.5mm Dia., Hard Coated OD 4.0 10nm Bandpass Filter
C\$260.40



#32-617 - 50mm Max. Aperture, Iris Diaphragm
C\$215.60

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	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"/>
	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"/>
	12.5/12.7mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-865	C\$60.90 Request Quote	CONTACT US <input type="text" value="1"/>
	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"/>
	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"/>
	2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-668	C\$88.20 Request Quote	20+ In Stock <input type="text" value="1"/>
	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	C\$116.20 Request Quote	20+ In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-850	C\$130.20 Request Quote	20+ In Stock <input type="text" value="1"/>
	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"/>
	12.5/12.7mm Optic Dia., Compact Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#34-720	C\$141.40 Request Quote	20+ In Stock <input type="text" value="1"/>
	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"/>
	12.5/12.7mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-853	C\$145.60 Request Quote	20+ In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
 	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"/> 
 	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"/> 
 	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	C\$162.40 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	12.5/12.7mm Optic Dia., Compact Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#34-721	C\$163.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	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"/> 
 	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"/> 
 	12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-814	C\$225.40 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-817	C\$254.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	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"/> 
 	12.5/12.7mm Optic Dia., Top Adjust Kinematic Mount, Lead Screw	Adjustable - Tip-Tilt		#13-768	C\$378.00 Request Quote	6 In Stock <input type="text" value="1"/> 
 	12.5/12.7mm Optic Dia., Top Adjust Kinematic Mount, Micrometer	Adjustable - Tip-Tilt		#13-769	C\$404.60 Request Quote	5 In Stock <input type="text" value="1"/> 
 	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"/> 
 	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

 APPLICATION NOTE

 VIDEO

Optical Filters
Review

- Application Note
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- FAQ
- Glossary
- Trending in Optics

The Importance of Optical Filter Orientation....

Custom Bandpass Filter using Shortpass an...

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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?

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