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TECHSPEC® 685nm CWL, 50mm Dia., Hard Coated OD 4.0 10nm Bandpass Filter



TECHSPEC Hard Coated OD 4.0 10nm Bandpass Filters

Stock **#86-742** **5 In Stock**

⊖ 1 ⊕ €679⁰⁰

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Volume Pricing	
Qty 1-5	€679,00 each
Qty 6-25	€543,00 each
Qty 26-49	€509,25 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Bandpass Filter **Type:**

HiLyte Fluor 680, FluoSpheres Dark Red **Typical Applications:**

Physical & Mechanical Properties

Diameter (mm):

50.00 +0.0/-0.1

Clear Aperture CA (mm):

45

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 typical

Optical Properties

Angle of Incidence (°):

0

Optical Density OD (Average):

≥4.0

Center Wavelength CWL (nm):

685.00 ±2.0

Full Width-Half Max FWHM (nm):

10.00 ±2.0

Full Width-Half Max FWHM Tolerance (nm):

±2.0

Substrate:

Optical Glass

Minimum Transmission (%):

≥85

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 ML-STD-810H, Section 507.6
Temperature per ML-STD-810H, Section 501.7 and 502.7

Regulatory Compliance

RoHS 2015:

Compliant

Certificate of Conformance:

[View](#)

REACH 241:

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

- Ideal for Life Sciences or Chemical Analysis
- Available in UV, VIS, and IR Center Wavelengths
- Feature High Performance Hard Coatings
- Hard Coated OD 4.0 [5nm](#), [25nm](#), and [50nm](#) Bandpass Filters Also Available

TECHSPEC® Hard Coated OD 4.0 10nm Bandpass Filters are narrowband filters used extensively in applications including flame photometry, elemental or laser line separation, fluorescence, laser diode cleanup, or chemical detection or analysis. These optical filters offer steep slopes with deep blocking to achieve high performance in demanding applications. TECHSPEC Hard Coated OD 4.0 10nm Bandpass Filters feature durable hard coatings to minimize filter degradation while increasing transmission. The bandpass filters are available in UV, VIS, and IR center wavelengths.

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



Compatible Mounts