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TECHSPEC® 464, 542 & 639nm, 50mm Dia., Tri-Band Filter



Multi-Band Fluorescence Bandpass Filters

Stock **#87-254** **1 In Stock**

⊖ 1 ⊕ C\$1,670²⁰

ADD TO CART

Volume Pricing	
Qty 1-9	C\$1,670.20 each
Qty 10-25	C\$1,402.80 each
Qty 26-49	C\$1,318.80 each
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Product Downloads

General

Bandpass Filter **Type:**

 CFP/YFP/Texas Red Emission **Compatible Fluorophore:**

Physical & Mechanical Properties

50.00 +0.0/-0.1 **Diameter (mm):**

45.34 **Clear Aperture CA (mm):**

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):
2.00 ±0.25

Optical Properties

Angle of Incidence (°):
0

Bandwidth (nm):
23 @ 464nm
27 @ 542nm
42 @ 639nm

Optical Density OD (Average):
≥6.0

Substrate:
Fused Silica (Corning 7980)

Coating:
Hard Coated

Surface Quality:
60-40

Transmission (%):
>90

Blocking Wavelength Range (nm):
250 - 1100

Multi-Band Center Wavelengths (nm):
464, 542, 639

Threading & Mounting

Mount Thickness (mm):
3.5 ±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

- Multiple Pass Bands on a Single Filter
- High Peak Transmission, Excellent Blocking
- Ideal for Simultaneous Viewing of Multiple Fluorophores
- For Optimal Performance Pair with [Multi-Edge Fluorescence Dichroic Filters](#)

TECHSPEC® Multi-Band Fluorescence Bandpass Filters are ideal for real time live cell analysis and high speed imagery. Each optical filter is hard coated and mounted in a black anodized aluminum housing. Having multiple pass bands on a single optical filter enhances fluorescence imagery and eases setup for a range of [fluorophore applications](#). TECHSPEC® Multi-Band Fluorescence Bandpass Filters feature high average transmission and excellent blocking, yielding maximum brightness and contrast in any application.

These filters are available as dual-band bandpass filters, triple-band bandpass filters, and quad-band bandpass filters. These filters are also referred to as dual-band filters, tri-band filters, or quad-band filters, respectively. They are ideal components in spectroscopy and clinical chemistry applications, as well as biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

Dual-band bandpass filters feature four designs with passband wavelengths from 433 and 530nm to 577 and 690nm. Triple-band bandpass filters feature three designs with passband wavelengths from 432, 517, and 615nm to 464, 542, and 639nm. Quad-band bandpass filters feature a design with passband wavelengths of 440, 521, 607, and 700nm.

Note: All filters feature wide out of band blocking from 250 - 1100nm with deep OD 6.0 blocking at critical discrimination wavelengths. For complete transmission and blocking profiles, download the individual curve for each filter.

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.

Compatible Mounts

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