

**TECHSPEC® 613nm, 50mm Diameter, Dichroic Laser Beam Combiner**



TECHSPEC® Dichroic Laser Beam Combiners

Stock **#86-401** **1 In Stock**

⊖ 1 ⊕ €720<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	€720,00 each
Qty 6-25	€612,00 each
Qty 26-49	€569,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Dichroic Filter **Type:**

**Physical & Mechanical Properties**

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

**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

**Optical Properties****Angle of Incidence (°):**

45

**Cut-On Wavelength (nm):**

613.00

**Substrate:** **Fused Silica** (Corning 7980)**Coating:**

Hard Coated

**Reflected Laser Wavelength (nm):**

561.4, 568.2, 594.1

**Reflection (%):**

&gt;98

**Reflection Wavelength (nm):**

561.4 - 594.1

**Surface Quality:**

60-40

**Transmission (%):**

&gt;95

**Transmission Wavelength (nm):**

632.8 - 790

**Transmitted Laser Wavelength (nm):**

632.8, 635, 647.1, 671, 676.4, 785

**Transmitted Wavefront, RMS:**

&lt;1λ

**Wavelength Range (nm):**

561 - 790

**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**

## Custom

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

- Polarization Insensitive
- Hard Sputtered Coating
- Multiple Sizes Available

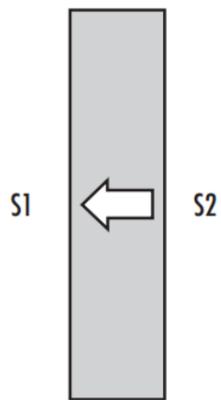
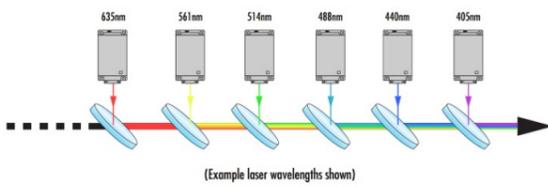
TECHSPEC® Dichroic Laser Beam Combiners are designed to efficiently combine or separate multiple laser beams at a 45° angle of incidence. The filters feature greater than 98% reflection and greater than 95% transmission at popular laser lines, yielding exceptionally low loss. These filters are available in a 12.5, 25, and 50mm diameters, with a range of cut-on, reflection, and transmission wavelengths. These filters are ideal for multi-laser fluorescence imaging and measurement applications, including laser microscopy and flow cytometry. TECHSPEC® Dichroic Laser Beam Combiners are constructed from low autofluorescence substrates with hard sputtered coatings. These filters are ideal for multi-laser fluorescence imaging and measurement applications, including laser microscopy and flow cytometry.

**Note:** These filters are optimized for high spectral performance rather than high Laser Induced Damage Thresholds (LIDT). A typical LIDT for these filters is  $1 \text{ J/cm}^2 @ 532\text{nm}$ , 10ns. Please [contact us](#) if you require a filter with a higher LIDT value.



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## 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