See all 21 Products in Family

# TECHSPEC® 427nm, 25mm Diameter, Dichroic Laser Beam Combiner

TECHSPEC® Dichroic Laser Beam Combiners

Stock **#86-389** **20+ In Stock**

- 1 + **S$415**.80

**ADD TO CART**

| Volume Pricing | |
|---|---|
| Qty 1-5 | **S$415.80** each |
| Qty 6-25 | **S$352.80** each |
| Qty 26-49 | **S$327.60** each |
| Need More? | Request Quote |

Product Downloads

## General

**Type:**

Dichroic Filter

## Physical & Mechanical Properties

**Diameter (mm):**

25.00 +0.0/-0.1

**Clear Aperture CA (mm):**

21.3

**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):**
427.00

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

**Coating:**
Hard Coated

**Reflected Laser Wavelength (nm):**
375, 405

**Reflection (%):**
>98

**Reflection Wavelength (nm):**
372 - 415

**Surface Quality:**
60-40

**Transmission (%):**
>95

**Transmission Wavelength (nm):**
439 - 647.1

**Transmitted Laser Wavelength (nm):**
440, 457.9, 473, 488, 514.5, 532, 543.5, 561.4, 568.2, 594.1, 632.8, 635, 647.1

**Transmitted Wavefront, RMS:**
<1λ

**Wavelength Range (nm):**
372 - 647

## 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.

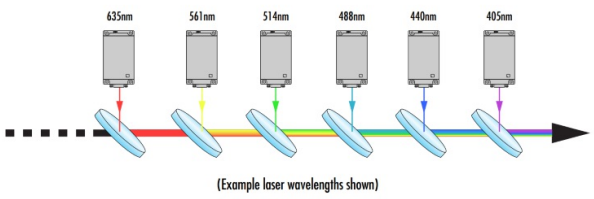
# Product Details

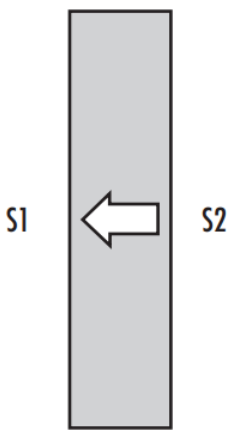
- Polarization Insensitive
- Hard Sputtered Coating
- Multiple Sizes Available

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 J/cm$^2$ @ 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.*

## Compatible Mounts

;