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TECHSPEC®

466nm, 50mm Diameter, Dichroic Laser Beam Combiner



TECHSPEC® Dichroic Laser Beam Combiners

Stock **#86-397** **1 In Stock**

-

1

+

£576<sup>00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | £576.00 each                  |
| Qty 6-25       | £489.60 each                  |
| Qty 26-49      | £455.20 each                  |
| Need More?     | <a href="#">Request Quote</a> |

**i** 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): |

|                                                                                                                                                      |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 45.3                                                                                                                                                 |                      |
|                                                                                                                                                      |                      |
| Mounted in Black Anodized Ring                                                                                                                       | Construction:        |
|                                                                                                                                                      |                      |
| Adhesion per MIL-PRF-13830B, Section C.4.5.12<br>Moderate abrasion per MIL-PRF-13830B, Section C.4.5.11<br>Cleaning per MIL-C-48497A Section 4.5.4.2 | Physical Durability: |

|   |                           |
|---|---------------------------|
| 2 | Substrate Thickness (mm): |
|---|---------------------------|

## Optical Properties

|        |                         |
|--------|-------------------------|
| 45     | Angle of Incidence (°): |
| 466.00 | Cut-On Wavelength (nm): |

|                             |                                     |
|-----------------------------|-------------------------------------|
| Fused Silica (Corning 7980) | Substrate: <input type="checkbox"/> |
| Hard Coated                 | Coating:                            |

|            |                                  |
|------------|----------------------------------|
| 440, 457.9 | Reflected Laser Wavelength (nm): |
| >98        | Reflection (%):                  |

|             |                             |
|-------------|-----------------------------|
| 439 - 457.9 | Reflection Wavelength (nm): |
| 60-40       | Surface Quality:            |

|             |                               |
|-------------|-------------------------------|
| >95         | Transmission (%):             |
| 473 - 647.1 | Transmission Wavelength (nm): |

|                                                                     |                                    |
|---------------------------------------------------------------------|------------------------------------|
| 473, 488, 514.5, 532, 543.5, 561.4, 568.2, 594.1, 632.8, 635, 647.1 | Transmitted Laser Wavelength (nm): |
| <1λ                                                                 | Transmitted Wavefront, RMS:        |

|           |                        |
|-----------|------------------------|
| 439 - 647 | Wavelength Range (nm): |
|-----------|------------------------|

## Threading & Mounting

|          |                       |
|----------|-----------------------|
| 3.5 ±0.1 | Mount Thickness (mm): |
|----------|-----------------------|

## Environmental & Durability Factors

|                                                                                                   |                           |
|---------------------------------------------------------------------------------------------------|---------------------------|
| Humidity per MIL-STD-810H, Section 507.6<br>Temperature per MIL-STD-810H, Section 501.7 and 502.7 | Environmental Durability: |
|---------------------------------------------------------------------------------------------------|---------------------------|

## Regulatory Compliance

|           |                             |
|-----------|-----------------------------|
| Compliant | RoHS 2015:                  |
| View      | Certificate of Conformance: |

|           |            |
|-----------|------------|
| Compliant | Reach 247: |
|-----------|------------|

## 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.

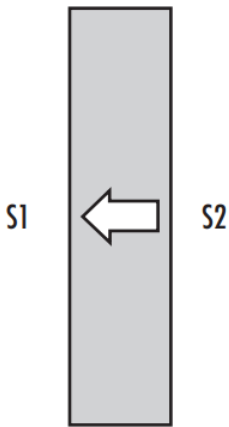
**Note:** These filters are optimized for high spectral performance rather than high Laser Induced Damage Thresholds (LIDT). A typical LIDT for these filters is 1 J/cm² @ 532nm, 10ns. Please [contact us](#) if you require a filter with a higher LIDT value.





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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.

## 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](#).

## Compatible Mounts