

**TECHSPEC® 506nm, 25.2 x 35.6mm High Performance Fluorescence Dichroic Filter**



Stock **#34-735** **2 In Stock**

£413<sup>.60</sup>

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| Qty 1-5        | £413.60 each                  |
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**General**

Dichroic Filter **Type:**

**Physical & Mechanical Properties**

25.2 x 35.6 **Dimensions (mm):**

35.60 **Length (mm):**

|  |                                    |
|--|------------------------------------|
| 1.05 ±0.1  | <b>Thickness (mm):</b>             |
| 25.20  | <b>Width (mm):</b>                 |
| +0.0/-0.2  | <b>Dimensional Tolerance (mm):</b> |
| <b>Physical Durability:</b><br>Adhesion per ML-PRF-13830B, Section C.4.5.12<br>Moderate abrasion per ML-PRF-13830B, Section C.4.5.11<br>Cleaning per ML-C-48497A Section 4.5.4.2 |                                    |

## Optical Properties

|   |  |
|---|--|
| 45  | <b>Angle of Incidence (°):</b>             |
| 506.00                                      | <b>Cut-On Wavelength (nm):</b>             |
| <a href="#">Fused Silica</a> (Corning 7980) | <b>Substrate:</b> <input type="checkbox"/> |
| Hard Coated                                 | <b>Coating:</b>                            |
| R <sub>avg</sub> >98%                       | <b>Reflection (%):</b>                     |
| 440 - 500                                   | <b>Reflection Wavelength (nm):</b>         |
| 40-20                                       | <b>Surface Quality:</b>                    |
| T <sub>avg</sub> >90%                       | <b>Transmission (%):</b>                   |
| 513 - 730                                   | <b>Transmission Wavelength (nm):</b>       |
| λ/10  | <b>Transmitted Wavefront, RMS:</b>         |
| 440 - 730                                   | <b>Wavelength Range (nm):</b>              |
| λ/2   | <b>Surface Flatness (P-V):</b>             |

## Environmental & Durability Factors

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

## Regulatory Compliance

|                           |                                    |
|---------------------------|------------------------------------|
| <a href="#">Compliant</a> | <b>RoHS 2015:</b>                  |
| <a href="#">View</a>      | <b>Certificate of Conformance:</b> |
| <a href="#">Compliant</a> | <b>Reach 247:</b>                  |

## Product Details

- Improved Flatness, Transmitted Wavefront, and Surface Quality
- Ideal for Fluorescence Microscopy or High Magnification Imaging Applications
- Most Popular Cut-On Wavelengths of Fluorescence and Longpass Dichroic Filters
- Standard [Fluorescence Dichroic Filters](#) are also available

Our TECHSPEC® High Performance Fluorescence Dichroic Filters feature the same broad, flat transmission and reflection ranges as our popular TECHSPEC® Fluorescence Dichroic Filters, but have improved physical parameters. Special attention to surface flatness, transmitted wavefront, and surface quality have resulted in our highest level of precision yet on a filter. These rectangular filters fit into most common Nikon, Zeiss, and Olympus fluorescence microscopes. High Performance Fluorescence Dichroic Filters are a perfect complement to our TECHSPEC® Fluorescence Bandpass Filters. For specific wavelength or size requirements, numerous custom options are available.

The TECHSPEC® Dichroic Filters (sometimes referred to as dichroic plate beamsplitters or dichroic mirrors) feature broad, flat transmission and reflection ranges with an ultra-steep slope between them. These attributes make them ideal for fluorescence imaging or spectral sorting applications, including DNA sequencing and polymerase chain reaction (PCR) diagnostic instruments.

**Note:** The filter should be oriented in such a way that the incoming light is incident on the surface that the chevron on the edge of the filter points towards (the dielectrically coated surface).

## Technical Information

| Filter Type            | Transmitted Wavefront (RMS) | Surface Quality | Surface Flatness (P-V) | R(avg) | T(avg) |
|------------------------|-----------------------------|-----------------|------------------------|--------|--------|
| HP Dichroic            | λ/10                        | 40-20           | λ/2                    | >98%   | >90%   |
| Fluorescence Dichroics | 1λ                          | 60-40           | -                      | >98%   | >90%   |

| Filter Type       | Transmitted Wavefront (RMS) | Surface Quality | Surface Flatness (P-V) | R(avg) | T(avg) |
|-------------------|-----------------------------|-----------------|------------------------|--------|--------|
| Dichroic Longpass | $\lambda/4$                 | 40-20           | -                      | >97%   | >85%   |

## 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](#).

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