

405/488/543/635 nm lasers BrightLine® quad-edge laser-flat dichroic beamsplitter

Part Number: Di01-R405/488/543/635-25x36



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(within US and Canada)

Your filter spectrum may differ slightly from the typical spectrum above, but is certified to meet the optical specifications noted below.



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Optimized beamsplitters for the most popular lasers used in fluorescence imaging, including newer all-solid-state lasers. All beamsplitters in this category have exceptional reflectance at the laser wavelengths, improved ("laser-grade") flatness, and anti-reflection (AR) coatings to minimize imaging artifacts resulting from the coherent laser light.

Part Number	Size	Price ¹	Stock Status
Di01-R405/488/543/635-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$565	In Stock

This part is not available for custom sizing.

¹ US domestic pricing only. If you are ordering from outside the US, please contact your nearest [regional distributor](#) for the correct list price.

Optical Specifications

Specification	Value
Reflection Band 1	Rabs > 94% 370 – 410 nm
Reflection Band 1 (p-pol)	Rabs > 90% 370 – 410 nm
Reflection Band 1 (s-pol)	Rabs > 98% 370 – 410 nm
Edge Wavelength 1	422.3 nm
Transmission Band 1	Tavg > 93% 429.5 – 462 nm
Reflection Band 2	Rabs > 94% 473 – 491 nm
Reflection Band 2 (p-pol)	Rabs > 90% 473 – 491 nm
Reflection Band 2 (s-pol)	Rabs > 98% 473 – 491 nm
Edge Wavelength 2	497.8 nm
Transmission Band 2	Tavg > 93% 503.5 – 526.5 nm
Reflection Band 3	Rabs > 94% 539.5 – 546.5 nm
Reflection Band 3 (p-pol)	Rabs > 90% 539.5 – 546.5 nm
Reflection Band 3 (s-pol)	Rabs > 98% 539.5 – 546.5 nm
Edge Wavelength 3	541.6 nm
Transmission Band 3	Tavg > 93% 560 – 615.5 nm
Reflection Band 4	Rabs > 94% 632.8 – 647.1 nm
Reflection Band 4 (p-pol)	Rabs > 90% 632.8 – 647.1 nm
Reflection Band 4 (s-pol)	Rabs > 98% 632.8 – 647.1 nm
Edge Wavelength 4	655.9 nm
Transmission Band 4	Tavg > 93% 665 – 800 nm
Laser Wavelengths 1	375 +/- 3 nm, 405 +/- 5 nm
Laser Wavelengths 2	473 +2/-0 nm, 488 +3/-2 nm
Laser Wavelengths 3	543.5 nm
Laser Wavelengths 4	632.8 nm, 635 +7/-0 nm, 647.1 nm

General Filter Specifications

Specification	Value
Angle of Incidence	45 degrees with a shift of 0.35%/degree (40 – 50 degrees)
Cone Half-angle	0.5 degrees
Optical Damage Rating	2 J/cm ² at 532 nm (for a 532nm filter)
Flatness	Laser Flat
Steepness	Steep
Effective Index	1.78

Physical Filter Specifications (applies to standard sized parts; contact us regarding other sizes)

Specification	Value
Transverse Dimensions (L x W)	25.2 mm x 35.6 mm
Transverse Tolerance	± 0.1 mm
Filter Thickness (unmounted)	1.05 mm
Filter Thickness Tolerance (unmounted)	± 0.05 mm
Clear Aperture	≥ 80% (elliptical)
Scratch-Dig	60-40
Substrate Type	Fused Silica
Substrate Thickness (unmounted)	1.05 mm
Substrate Thickness Tolerance (unmounted)	± 0.05 mm
Orientation	Reflective surface marked with part number - Orient in direction of incoming light