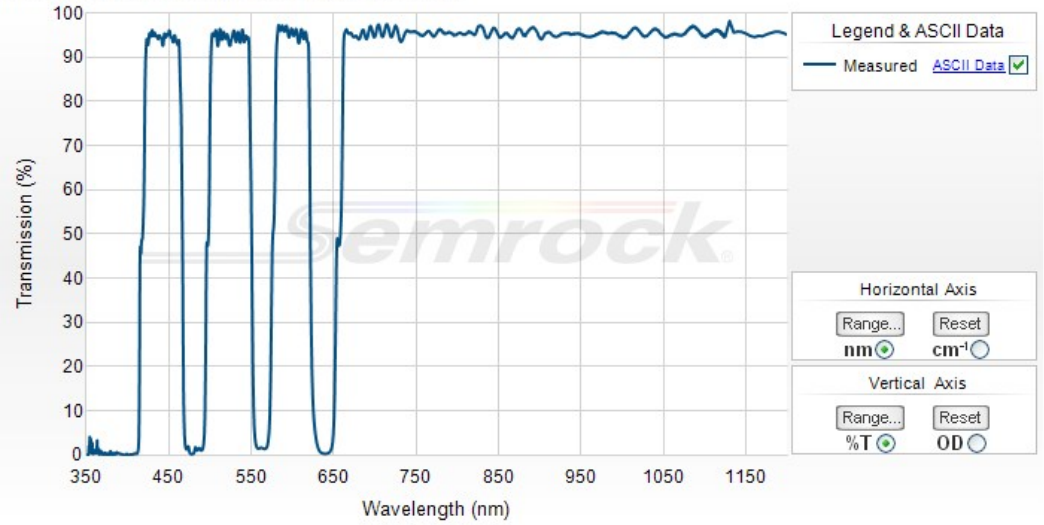
405/488/561/635 nm lasers BrightLine® quad-edge super-resolution laser dichroic beamsplitter
Part Number: Di03-R405/488/561/635-t1-25x36



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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.

405/488/561/635 nm lasers BrightLine® quad-edge super-resolution laser dichroic beamsplitter

The perfect beamsplitters for the most popular lasers used in fluorescence imaging, including all-solid-state lasers. All beamsplitters in this category have exceptional reflectance at the laser wavelengths, wider reflection bands — into UV for photoactivation and super-resolution techniques, and extended transmission regions — into IR to 1200 nm, and anti-reflection (AR) coatings to minimize imaging artifacts resulting from the coherent laser light.

Semrock's super-resolution laser dichroics deliver industry-leading flatness for minimal focus shift and optical wavefront aberrations of the laser beam spot to enable popular imaging and Super-resolution techniques such as TIRF, PALM, STORM, Structured-Illumination, and STED.

1λ P-V RWE on 1 mm
λ/5 P-V RWE on 3 mm

Part Number	Size	Price[1]	Stock Status
Di03-R405/488/561/635-t1-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	$595	2nd Day Ship
Di03-R405/488/561/635-t3-25x36	25.2 mm x 35.6 mm x 3.0 mm (unmounted)	$695	In Stock

This part is not available for custom sizing - contact us (semrock@idexcorp.com) for 50.8mm sizes

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	418.7 nm
Transmission Band 1	Tavg > 93% 426.0 – 462.0 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	498.3 nm
Transmission Band 2	Tavg > 93% 502.5 – 544.5 nm
Reflection Band 3	Rabs > 94% 559 – 568.2 nm
Reflection Band 3 (p-pol)	Rabs > 90% 559 – 568.2 nm
Reflection Band 3 (s-pol)	Rabs > 98% 559 – 568.2 nm
Edge Wavelength 3	575.4 nm
Transmission Band 3	Tavg > 93% 582 – 617.5 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	655.3 nm

Transmission Band 4	T_{avg} > 93% 663 – 1200 nm
Reflection Band 5	R_{avg} > 90% 350 – 370 nm
Laser Wavelengths 1	375 +/- 3 nm, 405 +/- 5 nm
Laser Wavelengths 2	473 +2/-0 nm, 488 +3/-2 nm
Laser Wavelengths 3	559 +5/-0 nm, 561.4 nm, 568.2 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	1 J/cm² @ 532 nm (10 ns pulse width)
Flatness (1 mm thickness)	1λ P-V RWE @ 632.8 nm
Flatness (3 mm thickness)	λ/5 P-V RWE @ 632.8 nm
Steepness	Steep
Effective Index	2.05

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 (1 mm, unmounted)	1.05 mm
Filter Thickness Tolerance (1 mm, unmounted)	± 0.05 mm
Filter Thickness (3 mm, unmounted)	3.0 mm
Filter Thickness Tolerance (3 mm, unmounted)	± 0.1 mm
Clear Aperture	≥ 80% (elliptical)
Scratch-Dig	60-40
Substrate Type	Fused Silica
Substrate Thickness (1 mm, unmounted)	1.05 mm
Substrate Thickness Tolerance (1 mm, unmounted)	± 0.05 mm
Substrate Thickness (3 mm, unmounted)	3.0 mm
Substrate Thickness Tolerance (3 mm, unmounted)	± 0.1 mm
Orientation	Reflective surface marked with laser dot - Orient in direction of incoming light