

488/561 nm lasers BrightLine® dual-edge super-resolution laser dichroic beamsplitter

Part Number: Di03-R488/561-t1-25x36

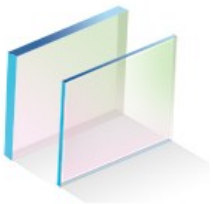


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(within US and Canada)

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



488/561 nm lasers BrightLine® dual-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 or 1600 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-R488/561-t1-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$495	In Stock
Di03-R488/561-t3-25x36	25.2 mm x 35.6 mm x 3.0 mm (unmounted)	\$595	In Stock

This part is not available for custom sizing - [contact us](mailto:semrock@idexcorp.com) (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% 471 – 491 nm
Reflection Band 1 (p-pol)	Rabs > 90% 471 – 491 nm
Reflection Band 1 (s-pol)	Rabs > 98% 471 – 491 nm
Edge Wavelength 1	500 nm
Transmission Band 1	Tavg > 93% 503.3 – 543 nm
Reflection Band 2	Rabs > 94% 559 – 568.2 nm
Reflection Band 2 (p-pol)	Rabs > 90% 559 – 568.2 nm
Reflection Band 2 (s-pol)	Rabs > 98% 559 – 568.2 nm
Edge Wavelength 2	575.5 nm
Transmission Band 2	Tavg > 93% 582.4 – 1200 nm
Laser Wavelengths 1	473 +/- 2 nm, 488 +/- 2 nm
Laser Wavelengths 2	559 +/- 0 nm, 561.4 nm, 568.2 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/cm ² @ 532 nm (10 ns pulse width)
Flatness (1 mm thickness)	1λ P-V RWE @ 632.8 nm

Flatness (3 mm thickness)	$\lambda/5$ P-V RWE @ 632.8 nm
Steepness	Steep
Effective Index	2.07

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	$\geq 80\%$ (elliptical)
Scratch-Dig	60-40
Substrate Type	Fused Silica
Substrate Thickness (unmounted)	1.05 mm
Substrate Thickness Tolerance (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