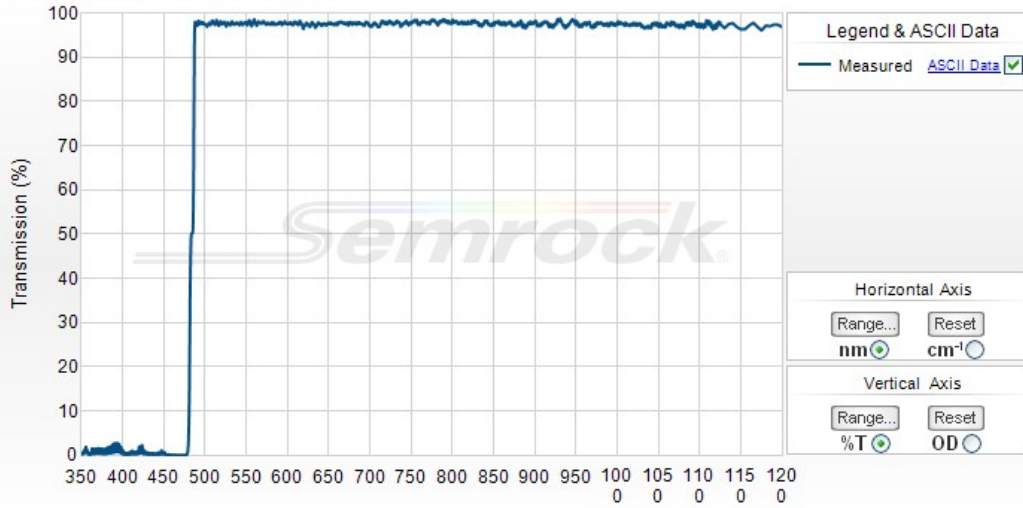


473 nm laser BrightLine® single-edge super-resolution laser dichroic beamsplitter

Part Number: Di03-R473-t1-25x36

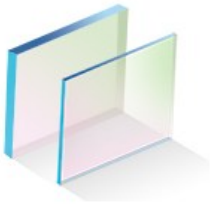


Semrock, Inc

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Rochester, New York 14624

Main Phone: +1 585.594.7050 (worldwide)
Toll Free Phone: 866.736.7625 (866-SEMROCK)
(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.



473 nm laser BrightLine® single-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-R473-t1-25x36 | New Product 25.2 mm x 35.6 mm x 1.1 mm (unmounted) | \$445 | In Stock |
| Di03-R473-t3-25x36 | New Product 25.2 mm x 35.6 mm x 3.0 mm (unmounted) | \$545 | 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% 457.9 – 478.0 nm |
| Reflection Band 1 (p-pol) | Rabs > 90% 457.9 – 478.0 nm |
| Reflection Band 1 (s-pol) | Rabs > 98% 457.9 – 478.0 nm |
| Reflection Band 2 | Ravg > 90% 350.0 – 457.9 nm |
| Edge Wavelength 1 | 484 nm |
| Transmission Band 1 | Tavg > 93% 486.6 – 1200 nm |
| Laser Wavelengths 1 | 473 ± 5 nm, 457.9 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 | Not Tested |
| 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 | 2.18 |

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 |