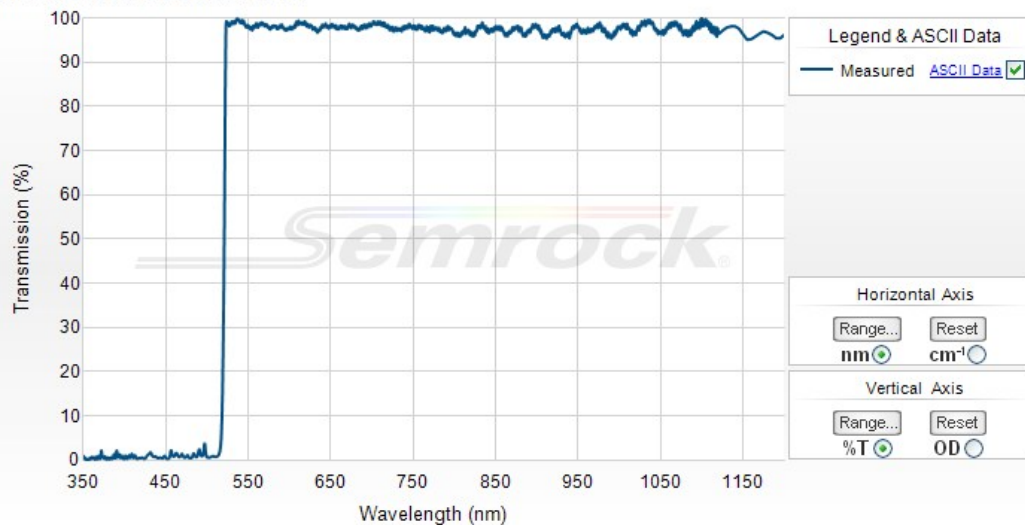


514 nm Laser BrightLine® single-edge laser-flat dichroic beamsplitter

Part Number: Di02-R514-25x36



Semrock, Inc

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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.



514 nm Laser BrightLine® single-edge laser-flat dichroic beamsplitter

The perfect 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 |
|-----------------|---|--------------------|--------------------------|
| Di02-R514-25x36 | 25.2 mm x 35.6 mm x 1.1 mm (unmounted) | \$405 | In Stock |
| Di02-R514-22x29 | 22.0 mm x 29.0 mm x 1.1 mm (unmounted) | \$405 | 2 nd Day Ship |

Don't see a size you need? Contact us for custom sizing – available in less than a week (sizing fee applies).

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 | R _{abs} > 94% 505 – 515 nm |
| Reflection Band 1 (p-pol) | R _{abs} > 90% 505 – 515 nm |
| Reflection Band 1 (s-pol) | R _{abs} > 98% 505 – 515 nm |
| Reflection Band 2 | R _{avg} > 90% 350 – 505 nm |
| Edge Wavelength 1 | 520 nm |
| Transmission Band 1 | T _{avg} > 93% 524.3 – 1200 nm |
| Laser Wavelengths 1 | 505.0 nm, 514.5 nm & 515.0 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 | 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 |