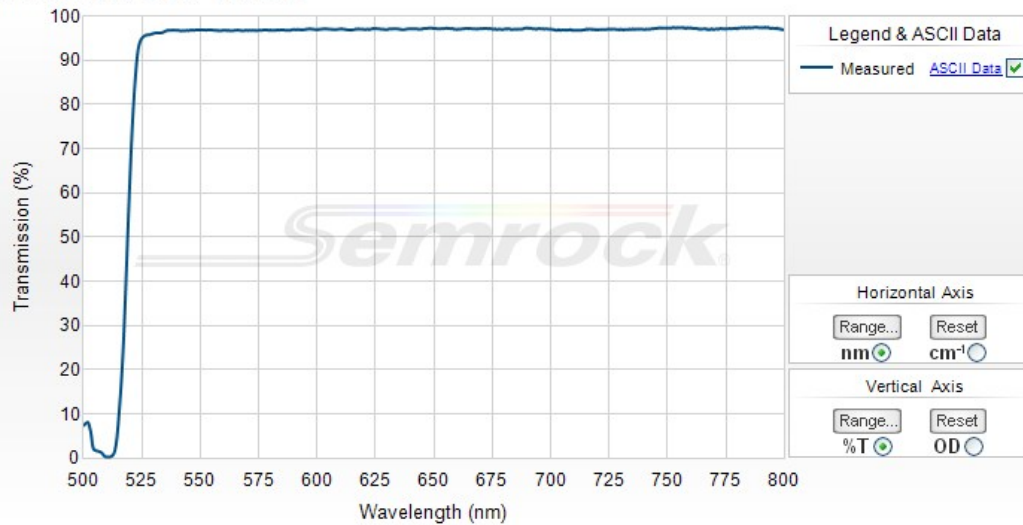


## 514.5 nm RazorEdge Dichroic™ laser-flat beamsplitter

Part Number: LPD01-514RU-25



### Semrock, Inc

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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.



### 514.5 nm RazorEdge Dichroic™ laser-flat beamsplitter

Each beamsplitter reflects a standard laser line incident at 45° while efficiently passing the longer Raman-shifted wavelengths. The filters exhibit ultrasteep transitions from reflection to transmission, with a guaranteed transition width of < 1% of the laser wavelength for the U-grade version.

Part Number	Size	Price <sup>1</sup>	Stock Status
LPD01-514RU-25	25 mm x 3.5 mm	\$575	In Stock
LPD01-514RU-25x36x1.1	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$795	In Stock
LPD01-514RU-25x36x2.0	25.2 mm x 35.6 mm x 2.0 mm (unmounted)	\$795	2nd Day Ship

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	R <sub>abs</sub> > 94% 514.5 nm
Reflection Band 1 (p-pol)	R <sub>abs</sub> > 90% 514.5 nm
Reflection Band 1 (s-pol)	R <sub>abs</sub> > 98% 514.5 nm
Edge Wavelength 1	519.6 nm
Transmission Band 1	T <sub>avg</sub> > 93% 521.2 – 797.5 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 <sup>2</sup> @ 532 nm (10 ns pulse width)
Flatness	<a href="#">Laser Flat</a>
Steepness	Ultra Steep
Laser Wavelength 1	514.5 nm
Edge Steepness (%)	0.5%
Edge Steepness (nm)	2.6 nm
Edge Steepness (cm-1)	96.7 cm-1
Transition Width (nm)	5.1 nm
Transition Width (cm-1)	192 cm-1
Effective Index	1.8

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

Specification	Value
Transverse Dimensions (Diameter)	25 mm
Transverse Tolerance	$\pm 0.1$ mm
Clear Aperture	$\geq 80\%$
Scratch-Dig	60-40
Substrate Type	Fused Silica
Substrate Thickness (unmounted)	2.0 mm
Substrate Thickness Tolerance (unmounted)	$\pm 0.1$ mm
Orientation	Arrow on ring indicates preferred direction of propagation of light.