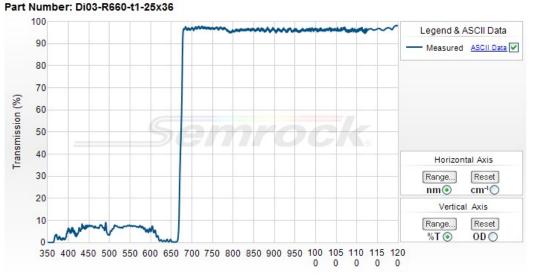
# 660 nm laser BrightLine® single-edge super-resolution laser dichroic beamsplitter





#### Semrock, Inc

3625 Buffalo Road, Suite 6 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.



#### 660 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	Price1	Stock Status
Di03-R660-t1-25x36	New Product	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$545	In Stock
Di03-R660-t3-25x36	New Product	25.2 mm x 35.6 mm x 3.0 mm (unmounted)	\$645	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% 647.1 – 665.0 nm	
Reflection Band 1 (p-pol)	Rabs > 90% 647.1 – 665.0 nm	
Reflection Band 1 (s-pol)	Rabs > 98% 647.1 – 665.0 nm	
Reflection Band 2	Ravg > 90% 350.0 – 647.1 nm	
Edge Wavelength 1	672.9 nm	
Transmission Band 1	Tavg > 93% 677.0 – 1200 nm	
Laser Wavelengths 1	647.1 nm, 658.0 nm, 660 ± 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	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	
Filter Effective Index	1.79 Understanding Filter Effective Index	

## 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