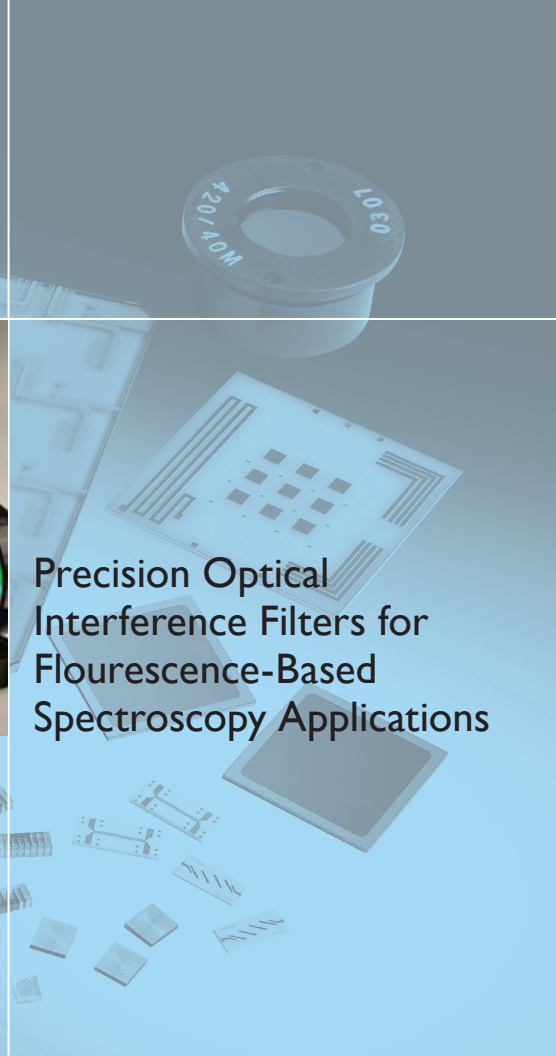




MATERION



Precision Optical
Interference Filters for
Flourescence-Based
Spectroscopy Applications

**BARR PRECISION OPTICS
& THIN FILM COATINGS**

Precision Optical Interference Filters for Fluorescence-Based Spectroscopy Applications

Materion is a recognized industry leader in the design and manufacture of precision optical filters for fluorescence-based spectroscopic applications, supplying filters in small, prototype quantity as well as in large OEM volume. All filters are designed to customer specifications.

Wavelength Range

Materion routinely produces custom optimal interference filters for fluorescence-based applications over a wide spectral range; from the ultraviolet through the near infrared.

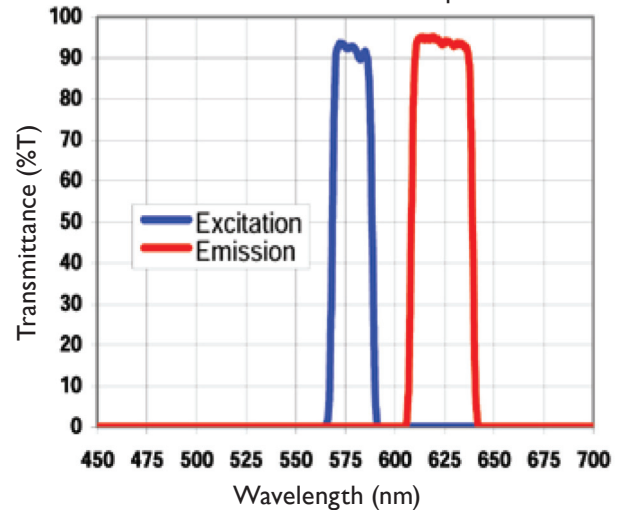
Dichroic Beamsplitters

- Low polarization splitting
- Steep slope
- Optimized for high R%, high T%
- Designed for use at 45 deg AOI or at other angle
- Image quality available
- Very low auto-fluorescence

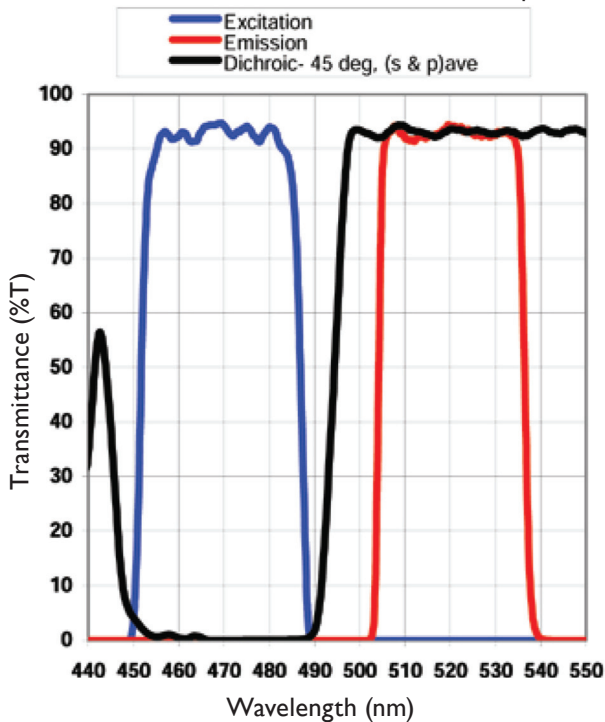
EX and EM Filters

- High Throughput
- Deep blocking (>OD 6) over detector responsivity range
- Low crosstalk between EX and EM passbands
- Image quality available
- Very low auto-fluorescence
- Stable, durable hard oxide coatings

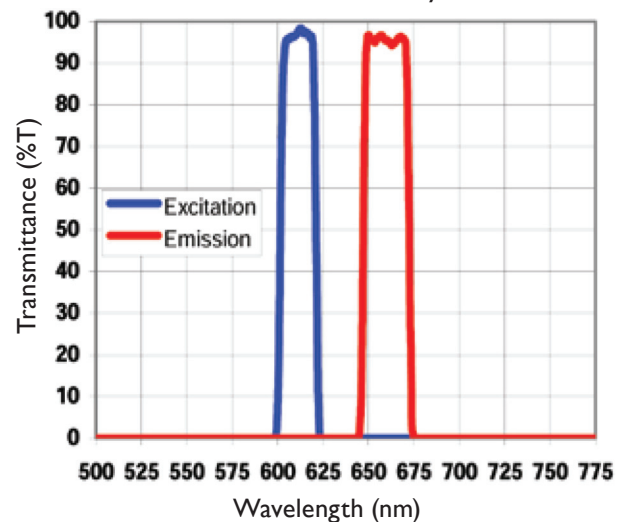
Filter Set for ROX™ Fluorophore



Filter Set with Dichroic for FAM fluorophore



Filter Set for LIZ™ Dye



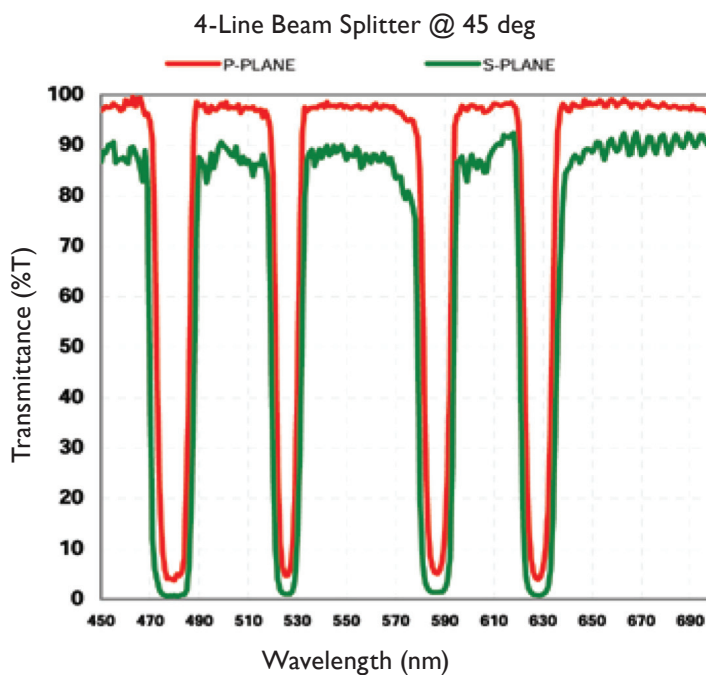
Materion Barr Precision Optics & Thin Film Coatings is a leading manufacturer and supplier of precision optical filters, hybrid circuits, flexible thin films and custom thin film coating services. We offer coating solutions for manufacturers in the defense, commercial, space, science, astronomy and thermal imaging markets.

Markets/Applications:

- DNA Sequencing
- Flow Cytometry
- Fluorescence Microscopy
- Fluorescence Imaging
- Microplate Reader
- Electrophoresis Scanners

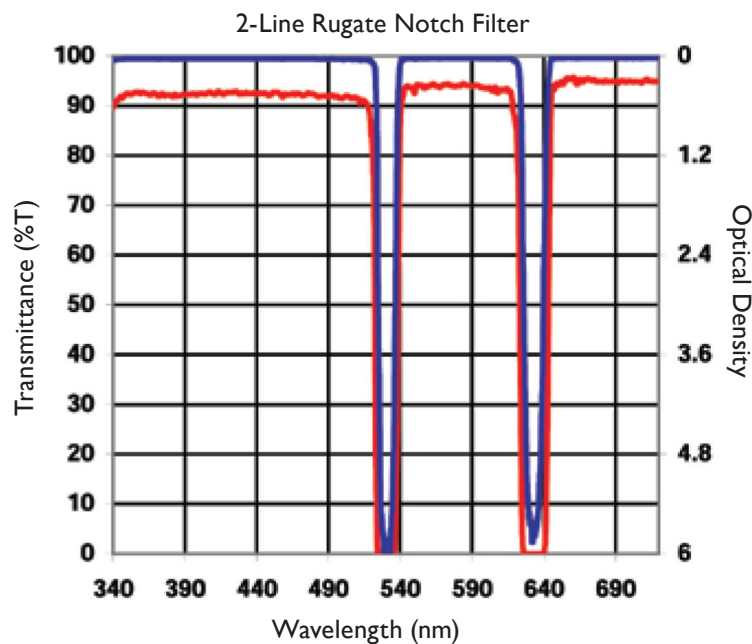
Rugate Notch Polychroic Beamsplitters

- High reflectance at multiple laser lines
- High transmission over broad spectral range
- Designed for use at 45 deg AOI or at other angle
- Very low auto-fluorescence



Rugate Notch Laser Rejection Filter (Single- and Multi-line)

- Deep blocking at laser lines (Measured OD6+)
- Steep slopes
- High transmission from near 300nm to 2500nm and beyond
- Typical FWHM Bandwidth 3% to 5% of center wavelength
- Low ripple in transmission band
- Designed for use at normal or non-normal incidence



Materion a global advanced materials company, dedicated to providing solutions that enable our customers' technologies and drive their growth. Our products include precious and non-precious specialty metals, precision optical filters, inorganic chemicals and powders, specialty coatings, specialty-engineered beryllium alloys, beryllium and beryllium composites, and engineered clad and plated metal systems. Materion business is structure to enhance our ability to provide customers with innovative, best total-cost solutions.

FOR PRECISION OPTICAL COATING PRODUCTS

2 Lyberty Way
Westford, MA 01886
Phone: +1 978.692.7513
www.materion.com/barroptics

FOR CUSTOM THIN FILM COATING PRODUCTS

153 Industrial Way
Buellton, CA 93427
Phone: +1 805.688.4949
www.materion.com/barroptics

MATERION CORPORATION

www.materion.com