

## Notch Filters

Notch filters are band rejection filters typically used to suppress strong laser beams in research experiments like Raman laser spectroscopy. They may also be used for eyesight protection or as attachment filters for cameras. All filters are manufactured by applying hard dielectric coatings.

### Standard Notch Filters

These design variants are available with a blocking of  $>OD4$  or  $>OD6$ . The advantage is that a transmission  $>90\%$  avg can be used over the complete spectrum of approx. 400 – 1200 nm. The bandwidths of the notch are in a range of approx. 20 – 73 nm.

We have typical wavelengths on hand in range from 400 – 1064 nm. If you need a notch filter design with broadband transmission range our standard notch filters are your best choices.



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### Narrow Notch Filters

Narrow Notch Part #	CWL [nm]	FWHM [nm]
LC-442NNF	442	10
LC-457NNF	457	10
LC-476NNF	476	10
LC-488NNF	488	10
LC-514.5NNF	514.5	12
LC-532NNF	532	12
LC-632.8NNF	632.8	16
LC-650NNF	650	17
LC-676NNF	676	17
LC-752NNF	752	19
LC-785NNF	785	20
LC-830NNF	830	21
LC-1064NNF	1064	36

**Note:**

Other dimensions, special wavelengths, coatings and beam angles on request.

### Optical Specifications

- Blocking: OD 6 at notch wavelength
- CWL [nm]: Notch wavelength
- FWHM [nm]: see table
- Transmission:  $0.8 \times \text{CWL} - 1.33 \times \text{CWL} > 90\%$
- Damage threshold: 1 MW/cm<sup>2</sup>
- Angle of incidence (degrees): 0.0 +/- 3
- Maximum possible angle to tune filters: 10°.

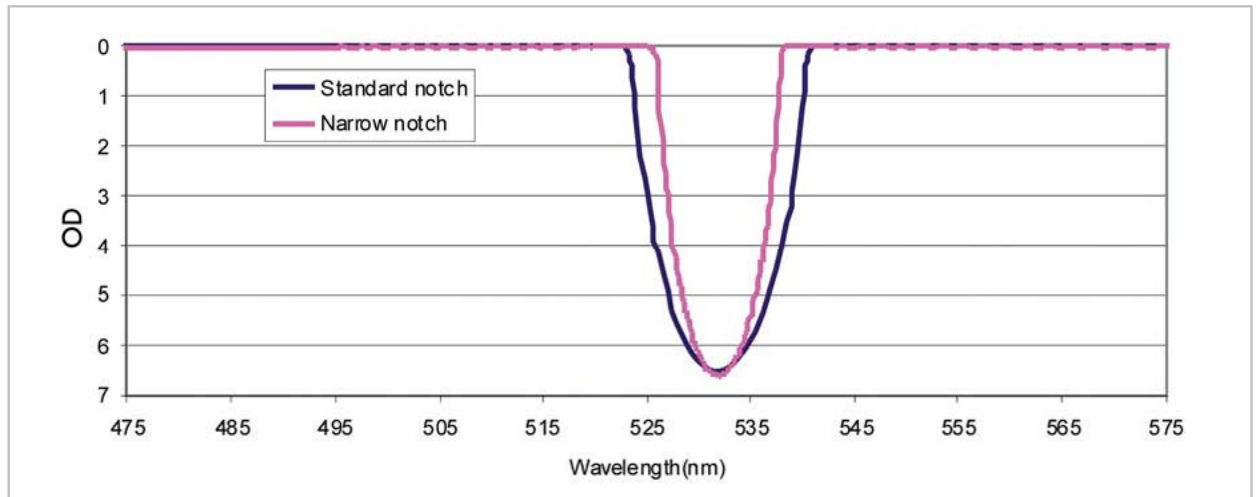
### Physical Specifications

- Clear aperture: 8 mm or 20 mm
- Outside diameter: 12.5 mm + 0.0/-0.2 mm or 25 mm + 0.0/-0.2 mm
- Substrate thickness: 3.0 mm ± 0.1 mm
- Surface quality: Scratch/Dig 60/40
- Mounted: yes

### Durability

- Environmental durability according to: MIL-STD-810F
- Mechanical durability according to: MIL-C-48497A

Transmission Curves of Standard and Narrow Notch Filters at 532 and 1064 nm.

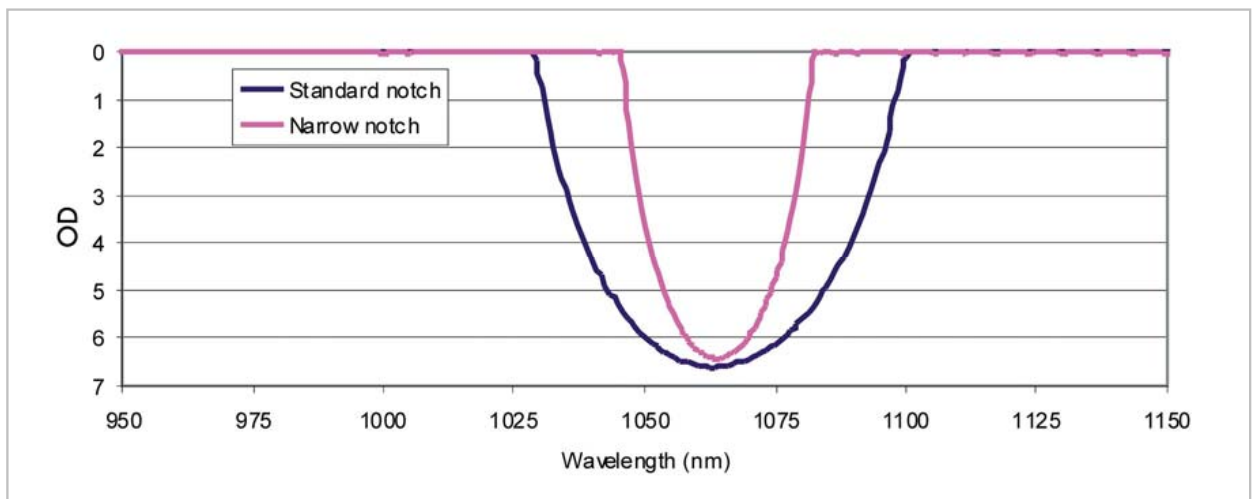


## Standard Notch Filters

- Laser line CWL: 532 nm
- FWHM: 17 nm

## Narrow Notch Filter

- Laser line CWL: 532 nm
- FWHM: 12 nm



## Standard Notch Filters

- Laser line CWL: 1064 nm
- FWHM: 73 nm

## Narrow Notch Filters

- Laser line CWL: 1064 nm
- FWHM: 36 nm