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## 0.4 OD, 12.5mm Dia., NIR II Coated, Absorptive ND Filter

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Anti-Reflection (AR) Coated HOYA Absorptive Neutral Density (ND) Filters

Stock **#13-221** **14 In Stock**

⊖ 1 ⊕ S\$88<sup>.20</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-10	S\$88.20 each
Qty 11-25	S\$77.00 each
Qty 26-49	S\$73.50 each
Need More?	<a href="#">Request Quote</a>

### Product Downloads

### General

Type:  
Neutral Density Filter

Stock No. of Uncoated Filter:  
[#48-525](#)

### Physical & Mechanical Properties

Diameter (mm):

12.50

Thickness (mm):

2.50 ±0.5

Dimensional Tolerance (mm):

±0.1

Parallelism (mm):

<0.02

## Optical Properties

Optical Density OD (Average):

0.4 ±0.05 @ 400-700nm (Uncoated Filter)

Nominal Optical Density @ Center of Coating:

0.55 @ 1200nm

Glass/Filter Number:

Hoya ND40

Substrate:

ND Filter Glass

Coating:

NIR II (750-1550nm)

Index of Refraction (n<sub>d</sub>):

1.50

Surface Quality:

80-50

Transmission (%):

40.0 (average) @ 400 - 700nm

Blocking Wavelength Range (nm):

400 - 700

Coating Specification:

R<sub>abs</sub> ≤1.5% @ 750 - 800nm  
R<sub>abs</sub> ≤1.0% @ 800 - 1550nm  
R<sub>avg</sub> ≤0.7% @ 750 - 1550nm

Wavelength Range (nm):

750 - 1550

## Material Properties

Transformation Temperature (°C):

525

## Regulatory Compliance

RoHS 2015:

Compliant

Certificate of Conformance:

[View](#)

Reach 250:

Compliant

## Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- Optical Densities from 0.1 to 4.0
- VIS 0°, NIR I, and NIR II Coating Options
- 12.5, 25, and 50mm Diameter Sizes
- Uncoated [HOYA](#) or [SCHOTT](#) ND Filters Also Available

Anti-Reflection (AR) Coated HOYA Absorptive Neutral Density (ND) Filters feature HOYA colored glass substrates that are AR coated on both surfaces to reduce back reflections in the visible or near-infrared (NIR) spectra. VIS 0°, NIR I, and NIR II broadband AR coatings cover the spectral ranges of 425-675nm, 600-1050nm, and 750-1550nm. These neutral density filters attenuate light via absorption and can be stacked together to achieve custom optical densities to meet application requirements. Anti-Reflection (AR) Coated HOYA Absorptive Neutral Density (ND) Filters are ideal for use in imaging and detection applications to reduce stray light, as well as in general filter stacking applications to control intensity. The standard metric diameters of 12.5, 25, and 50mm are compatible with our [TECHSPEC® C, S, and T-Mount Circular Optic Mounts](#) for benchtop applications.

## Technical Information





## Compatible Mounts