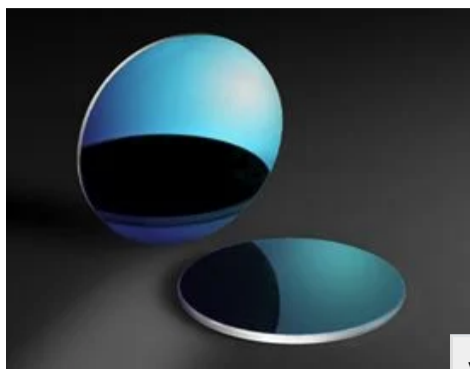


# 1.3 OD, 12.5mm Dia., IR Neutral Density Filter



Infrared (IR) Neutral Density (ND) Filters

Stock #12-013 **1 In Stock**

1

C\$588<sup>.00</sup>

**ADD TO CART**

Volume Pricing	
Qty	C\$588.00 each
1+	
Need More?	<a href="#">Request Quote</a>

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	<a href="#">Download All</a>

## General

**Type:** Neutral Density Filter

## Physical & Mechanical Properties

**Diameter (mm):** 12.50 ±0.2

**Thickness (mm):** 1.00 ±0.2

**Parallelism (arcmin):** <10

**Clear Aperture (%):** 90

## Optical Properties

**Optical Density OD (Average):** 1.3

**Substrate:** Germanium (Ge)

**Coating:** Metallic Based ND

**Surface Quality:** 80-50

**Transmission (%):** 5.0

**Transmission Tolerance (%):** ±1.3

**Blocking Wavelength Range (nm):** 2000 - 14,000

**Wavelength Range (µm):** 2 - 14

**Surface Flatness (P-V):** 3 - 5λ

## Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

REACH 241: **Compliant**

## Product Details

- Spectrally Flat from 2µm to 14µm
- Precision Germanium Substrate

- Due to material supply chain disruptions with germanium, there may be increased lead times and price changes on our germanium products. For more information, please contact our customer service team.

Infrared (IR) Neutral Density (ND) Filters feature excellent linearity over a wide spectral band of 2µm to 14µm. Ideal for thermal and medical imaging, the filters are available in a variety of densities and 2 size options. Attenuation is achieved by a metal alloy coating, which employs a combination of absorption and reflection to achieve the stated transmittance value. Infrared (IR) Neutral Density (ND) Filters feature a germanium substrate and are available in 12.5, 25, and 50mm diameters with varying transmissions and optical densities. All 5 optical densities are available as part of our Neutral Density Filter Kits. The kits are ideal for integration with our filter wheels.

Please contact our [Applications Engineering Department](#) to discuss custom size and density options.

## Technical Information

### Special Handling

#### Germanium Optics Handling and Cleaning Guidelines

Germanium optics require special handling and cleaning procedures. Always wear gloves during handling to prevent contamination, and wash hands afterward. Avoid contact between Germanium dust and the eyes, skin, or clothing. When not in use, store optics sealed and covered at temperatures between 20°C and 25°C. Do not expose them to temperatures exceeding 100°C when in use.

##### Handling Guidelines

- Always wear [gloves](#) to prevent damage from skin oils.
- If Germanium dust is present, take the following precautions:
  - Wear safety glasses to protect eyes.
  - Use a dust mask or face mask to avoid inhalation.
  - Wear [gloves](#) to prevent skin contact.
- Maintain storage temperature between 20°C and 25°C with humidity below 30%.
- Wrap Germanium optics in a [lens cloth](#) or [pouch](#) and seal in a [container](#) when not in use.
- Germanium is brittle and heavy — always place it on soft surfaces and avoid dropping it.

##### Approved Cleaning Solvents

- Ethanol
- Isopropyl Alcohol
- Methanol
- Reagent-Grade Acetone
- Liquid CO<sub>2</sub>
- [Shop Now](#)

## Accessories

**Note:** Compatible accessories for individual stock numbers may vary. If unsure about which accessories work with your products, please contact us [here](#).

	Title	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a>	0.3 - 3.0 OD, 12.5mm Dia., IR Neutral Density Filter Kit (9 Filters)		<a href="#">#15-114</a>	<b>C\$4,760.00</b> <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
<a href="#">MORE+</a>	IR Neutral Density Filter Kit, 50mm Diameter		<a href="#">#64-364</a>	<b>C\$6,410.60</b> <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
<a href="#">MORE+</a>	IR Neutral Density Filter Kit, 50mm Diameter		<a href="#">#87-206</a>	<b>C\$12,136.60</b> <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>

### Frequently Purchased Together



#56-759 - 12.5/12.7mm, Mounting Cell



#56-760 - 25/25.4mm, Mounting Cell



#58-183 - 12 Position Filter Wheel for 0.5" Diameter Filters



#60-375 - 7.75" x 4" Sheets, Industrial Grade Lens Tissue

C\$38.15

Qty



C\$38.15

Qty



C\$448.00

Qty



C\$55.30

Qty



## Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-529	C\$142.80 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	7.0 - 40.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-676	C\$148.40 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	C\$151.20 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	C\$162.40 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	C\$168.00 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-077	C\$219.80 <a href="#">Request Quote</a>	5 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-955	C\$365.40 <a href="#">Request Quote</a>	5 In Stock <input type="text" value="1"/>
	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	C\$574.00 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#84-640	C\$589.40 <a href="#">Request Quote</a>	7 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-958	C\$600.60 <a href="#">Request Quote</a>	5 In Stock <input type="text" value="1"/>

Check out our full selection of mounts [here](#).

## Resources

### Media Type

- Scientific Paper
- Video
- Glossary

SCIENTIFIC PAPER

Advantages of using engineered chalcogenide...

VIDEO

Infrared Light

GLOSSARY

Short Wave Infrared (SWIR)

Application Note

FAQ

 APPLICATION NOTE

Understanding  
Neutral  
Density Filters

? FAQ

What is an ND  
Filter?

? FAQ

Can I place ND  
filters back-to-  
back and  
increase...

[View More](#)