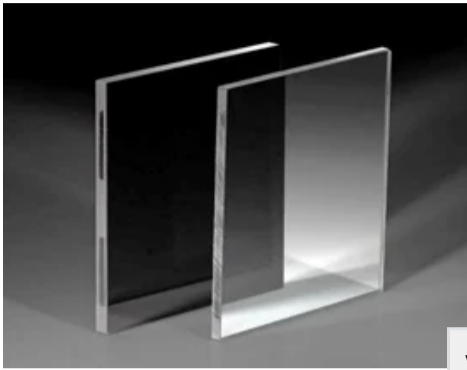


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/ [SCHOTT NG Absorptive Neutral Density \(ND\) Filters](#)

SCHOTT NG4, 0.6 OD, 50mm Sq., Absorptive ND Filter

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Stock #14-046 **6 In Stock**

1 C\$136^{.50}

ADD TO CART

Volume Pricing	
Qty 1-10	C\$136.50 each
Qty 11-49	C\$119.00 each
Need More?	Request Quote

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	Download All

General

Type: Neutral Density Filter

Physical & Mechanical Properties

Dimensions (mm):	50.0 x 50.0	Length (mm):	50.00
Thickness (mm):	1.20 (nominal)	Width (mm):	50.00
Parallelism (arcmin):	≤3	Dimensional Tolerance (mm):	±0.2

Optical Properties

Optical Density OD (Average):	0.6 ±0.03 @ 546nm	Glass/Filter Number:	SCHOTT NG4
Coating:	Uncoated	Index of Refraction (n_d):	1.51
Surface Quality:	60-40	Transmission (%):	25.12 ±1.51% @ 546nm
Wavelength Range (nm):	400 - 700		

Material Properties

Transformation Temperature (°C): 483

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

Product Details

- Tightly Controlled Transmission Specifications
- NG4, NG9, or NG11 Glass Types
- Specified Optical Densities from 0.15 to 5.0
- Provide Even Light Attenuation in the Visible Spectrum
- **SCHOTT NG Gray Glass** Also Available

SCHOTT NG Absorptive Neutral Density (ND) Filters consist of NG4, NG9, or NG11 SCHOTT glass types and provide even light attenuation through absorption in the visible spectrum. These filters are manufactured to achieve a specified optical density, ranging from 0.15 to 5.0, to simplify integration into optical systems. SCHOTT NG Absorptive Neutral Density (ND) Filters are available in a standard 50 x 50mm size and multiple filters can be stacked to achieve custom optical densities. Custom sizes from 5 to 160mm as well as custom optical densities or transmission values for specific wavelengths are available on request; for more information, visit our [Colored Glass Filter Manufacturing](#) capabilities webpage. [SCHOTT NG Gray Glass Filters](#) are also available.

Each filter lot is measured and thickness is adjusted to meet the specified transmission value at 546nm. Variations in filter lot performance can result in variations in nominal thickness; however, the transmission variations between lots will be minimal.

Filter Simulation Software

[Click here](#) to download SCHOTT's colored glass filter calculation program which can be used to calculate the internal transmittance and external transmission of each SCHOTT glass type. The program can simulate the performance of individual filters with user specified thickness or of stacked filters with varying glass types and thicknesses.

Technical Information

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
MORE+	12.5mm Dia., SCHOTT NG Absorptive ND Filter Kit (14 Filters)		#15-094	C\$387.80 Request Quote	CONTACT US 1
MORE+	25mm Dia., SCHOTT NG Absorptive ND Filter Kit (14 Filters)		#15-095	C\$714.00 Request Quote	CONTACT US 1
MORE+	50mm Sq., SCHOTT NG Absorptive ND Filter Kit (14 Filters)		#15-096	C\$1,533.00 Request Quote	1 In Stock 1

Quote Your Size

PLEASE ENTER YOUR REQUIRED SPECIFICATIONS HERE:

Glass Type

Filter Number

Thickness (mm)

Shape

Diameter (mm)

Length (mm)

Width (mm)

General Information SCHOTT Optical Filter Glass:	
BG	Blue, blue-green, and multiband glasses
GG	Nearly colorless to yellow glasses, IR transmitting
KG	Virtually colorless glasses with high transmission in the visible and absorption in the IR
NG	Neutral density glasses with uniform attenuation in the visible range
OG	Orange glasses, IR transmitting
RG	Red and black glasses, blocking visible, IR transmitting
UG	Black and blue glasses, UV transmitting
VG	Green glasses

Quantity

[GET PRICING](#)

TYPICAL 3-4 WEEK DELIVERY. DELIVERY DATE TO BE CONFIRMED AT TIME OF ORDER.

Standard Manufacturing Tolerances:

Edge length and diameter	+/-0.2 mm
Thickness	For ≤ 1mm: ± 0.1mm For > 1 – 3mm: ± 0.2mm
Surface Quality	60 – 40
Surface Accuracy	≤8 Waves
Parallelism	≤3 arcmin
Clear Aperture	≥90%
Edges & Bevels	Round parts ≥ Ø5mm: polished edges & protective bevel Square & rectangular parts < 50 x 50mm: polished edges, no bevel
Edge Chips	For ≤ Ø80mm: < 0.3mm (5/E0.3), for ≥ Ø81mm < 0.6mm (5/E0.6)

Surface quality according to DIN ISO 10110:

Polishing quality	P2
Defects	5/3 x 0.63
All edges machined	
Round filters with chamfer max. 0.5mm, square and rectangular < 50x50mm without chamfer	
Edge chips permitted up to 5/E0.3	

WG Colorless glasses with different cut-offs in the UV, transmitting in the visible and IR ranges

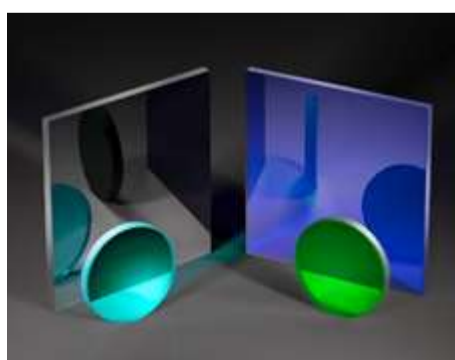
Note: The spectral curves above show the internal transmittance of the individual optical filter glasses

[ADDITIONAL CAPABILITIES](#)

Frequently Purchased Together



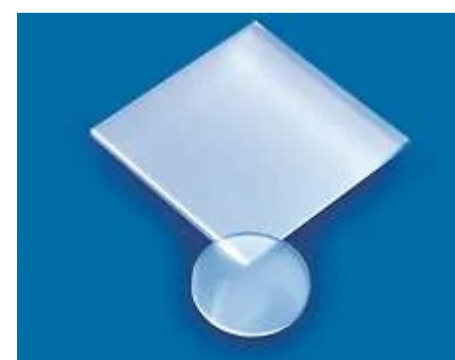
#33-355 - 12.0mm Dia. x 36.0mm FL, VIS-NIR Coated, Plano-Convex Lens
C\$70.00



#34-448 - Hoya G533 (VIS) 25mm Square, Colored Glass Bandpass Filter
C\$105.00













#34-475 - 50mm Dia. White Diffusing Glass
C\$63.35



#43-724 - 50 x 50mm Sandblasted Glass
C\$28.35



Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
 MORE+	Spring Mount Filter Holder, Metric	Fixed		#55-531	C\$122.50 Request Quote	6 In Stock <input type="text" value="1"/> 
 MORE+	40mm Sq., Fixed Filter Holder	Fixed		#54-997	C\$130.90 Request Quote	16 In Stock <input type="text" value="1"/> 
 MORE+	Filter Kinematic Mount, 2-Screw	Adjustable - Tip-Tilt		#58-874	C\$170.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
 MORE+	60mm sq - Rectangular Bar Clamp	Fixed		#54-995	C\$176.40 Request Quote	20+ In Stock <input type="text" value="1"/> 
 MORE+	Filter Kinematic Mount, 3-Screw	Adjustable - Tip-Tilt		#58-875	C\$193.20 Request Quote	20+ In Stock <input type="text" value="1"/> 

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

Resources

Media Type

- Application Note
- FAQ
- Glossary
- Video

APPLICATION NOTE

Understanding Neutral Density Filters

? FAQ

What is an ND Filter?

? FAQ

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

? FAQ

What is the difference between using an absorptiv...

? FAQ

How should I orient my reflective ND or interferenc...

GLOSSARY

Continuously Variable Apodizing Filter

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