

[« See all 53 Products in Family](#)
[All Products](#) / [Optics](#) / [SCHOTT Optical Components](#)
[/ SCHOTT Colored Glass Heat Absorbing Shortpass Filters](#)

SCHOTT KG5, 25mm Dia., 3mm Thick, Colored Glass Heat Absorbing Shortpass Filter

[See More by SCHOTT Optical Components](#)

 Stock #49-093 **20+ In Stock**

 - 1 + **£39^{.20}**
[ADD TO CART](#)

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-5 | £39.20 each |
| Qty 6-10 | £35.20 each |
| Need More? | Request Quote |

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

Prices shown are exclusive of VAT/local taxes

| General | |
|---|----------------------|
| Type: | IR Cut-Off Filter |
| Physical & Mechanical Properties | |
| Diameter (mm): | 25.00 |
| Thickness (mm): | 3.00 ±0.38 |
| Dimensional Tolerance (mm): | ±0.25 |
| Bevel: | Protective as needed |
| Optical Properties | |
| Glass/Filter Number: | SCHOTT KG5 |
| Substrate: | Heat Absorbing Glass |
| Coating: | Uncoated |
| Index of Refraction (n_d): | 1.51 |
| Surface Quality: | 60-40 |
| Reflection Factor P_d: | 0.92 |
| Wavelength Range (nm): | 300 - 2700 |
| Material Properties | |
| Density (g/cm³): | 2.53 |
| Transformation Temperature (°C): | 565 |
| Environmental & Durability Factors | |
| Operating Temperature (°C): | 300 Maximum |

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: **View**

Reach 247: **Compliant**

Product Details

- SCHOTT KG Colored Glass Substrates
- Absorb Infrared Radiation
- Standard Sizes with 1, 2, or 3mm Thickness

SCHOTT Colored Glass Heat Absorbing Shortpass Filters feature SCHOTT's KG color glass, providing excellent absorption of infrared radiation. These filters can also be used as shortpass filters, passing visible wavelengths while blocking infrared radiation. SCHOTT Colored Glass Heat Absorbing Shortpass Filters are ideal for protecting sensitive components from heat generated by high intensity illumination systems. Custom sizes from 5 to 160mm are available upon request; for more information, visit our [Colored Glass Filter Manufacturing capabilities webpage](#).

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.

Interactive transmission curves are also available [here](#).

Immediate Custom Quotes Available

If you have a need for any round, square, or rectangular size of a SCHOTT Colored Glass Heat Absorbing Shortpass Filter in dimensions between 5mm and 50mm, please visit our [Colored Filter Glass Tool](#). We'll provide an immediate quote, and can deliver the part to your requested size in approximately 2 weeks. A full list of standard manufacturing tolerances and restrictions are listed. For fully customized filters to your requirements, visit our [Customized Optical Filter Glass Capabilities](#) page.

Technical Information

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

Quote Your Size

PLEASE ENTER YOUR REQUIRED SPECIFICATIONS HERE:

Glass Type ⓘ

BG

Filter Number

Thickness (mm) ⓘ

Shape ⓘ

Diameter (mm) ⓘ

0

Length (mm) ⓘ

0

Width (mm) ⓘ

0

Quantity

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

[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 $\leq 1\text{mm}$: $\pm 0.1\text{mm}$ For $> 1 - 3\text{mm}$: $\pm 0.2\text{mm}$ |
| Surface Quality | 60 - 40 |
| Surface Accuracy | ≤ 8 Waves |
| Parallelism | ≤ 3 arcmin |
| Clear Aperture | $\geq 90\%$ |
| Edges & Bevels | Round parts $\geq \varnothing 5\text{mm}$: polished edges & protective bevel Square & rectangular parts $< 50 \times 50\text{mm}$: polished edges, no bevel |
| Edge Chips | For $\leq \varnothing 80\text{mm}$: $< 0.3\text{mm}$ (5/E0.3), for $\geq \varnothing 81\text{mm}$ $< 0.6\text{mm}$ (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 $< 50 \times 50\text{mm}$ without chamfer | |
| Edge chips permitted up to 5/E0.3 | |

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

[ADDITIONAL CAPABILITIES](#)

Frequently Purchased Together



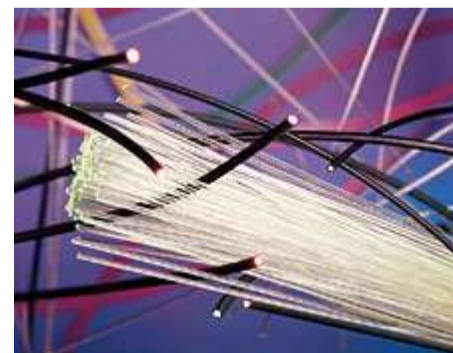
#32-754 - SCHOTT OG-550,
25.4mm Dia., 3mm Thick, Colored
Glass Longpass Filter
£36.80

Qty



#32-759 - SCHOTT RG-850,
25.4mm Dia., 3mm Thick, Colored
Glass Longpass Filter
£52.00

Qty



#02-534 - 1000 μm , Optical Grade
Plastic Optical Fiber Unjacketed
£1.60

Qty





















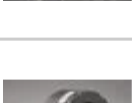

































#32-301 - 6.25mm Dia. x 15mm
FL, MgF₂ Coated, Achromatic
Doublet Lens
£56.80

Qty



Compatible Mounts

| | | Title | Type | Compare | Stock Number | Price □ | Buy |
|-----------------------|---|--|-----------------------|----------------|-----------------------------|---|---|
| MORE+ |  | 25.0/25.4mm Optic Dia., SM1 Thin Mount, M4 | Fixed | | #13-787 | £16.80 Request Quote | 9 In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., SM1 Thin Mount, 8-32 | Fixed | | #13-788 | £16.80 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0mm Optic Dia., Optic Mount | Fixed | | #64-560 | £26.20 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., E-Series Kinematic Mount | Adjustable - Tip-Tilt | | #15-866 | £34.80 Request Quote | 10 In Stock <input type="text" value="1"/>  |
| MORE+ |  | 2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount | Fixed | | #03-668 | £50.40 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., L-Slot Direct Mount | Fixed | | #36-410 | £54.40 Request Quote | 15 In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., Side Flange Direct Mount | Fixed | | #36-414 | £56.80 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount | Fixed | | #36-605 | £66.40 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., Optical Cell Assembly | Fixed | | #36-461 CLEARANCE | £76.76 Request Quote | 2 In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., Kinematic Mount, 2-Screws | Adjustable - Tip-Tilt | | #58-851 | £78.80 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., L-Slot and Rotation Direct Mount | Adjustable - Rotary | | #36-411 | £81.60 Request Quote | 5 In Stock <input type="text" value="1"/>  |
| MORE+ |  | 5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder | Fixed | | #55-529 | £81.60 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 7.0 - 40.0mm Optic Height, English Bar-Type Optic Holder | Fixed | | #03-676 | £84.80 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 25.0/25.4mm Optic Dia., Kinematic Mount, 3-Screws | Adjustable - Tip-Tilt | | #58-854 | £85.60 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+ |  | 10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder | Fixed | | #55-530 | £86.40 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+ |  | 19.5 - 108.0mm Optic Dia., Three-Screw Adjustable Ring Mount | Fixed | | #03-670 | £91.20 Request Quote | 20+ In Stock <input type="text" value="1"/>  |

| | Title | Type | Compare | Stock Number | Price | Buy |
|---|---|--------------------------------------|---------|--------------|--|---|
| MORE+  | 7.0 - 67.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-669 | £92.80 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 8.0 - 118.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-666 | £96.00 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-077 | £125.60 Request Quote | 5 In Stock <input type="text" value="1"/>  |
| MORE+  | 25.0/25.4mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws | Adjustable - Tip-Tilt | | #26-815 | £128.80 Request Quote | 4 In Stock <input type="text" value="1"/>  |
| MORE+  | 25.0/25.4mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws | Adjustable - Tip-Tilt | | #26-818 | £145.60 Request Quote | 9 In Stock <input type="text" value="1"/>  |
| MORE+  | 25.0/25.4mm Optic Dia., X-Y Translating Optic Mount | Adjustable - Linear (XY) | | #62-956 | £220.80 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+  | 5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-078 | £328.00 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+  | 25.0/25.4mm Optic Dia., Precision Gimbal Mount | Adjustable - Gimbal | | #54-999 | £368.80 Request Quote | 4 In Stock <input type="text" value="1"/>  |
| MORE+  | 25.0/25.4mm Optic Dia., X-Y-Z Translating Optic Mount | Adjustable - Linear (XYZ) | | #62-959 | £432.00 Request Quote | 6 In Stock <input type="text" value="1"/>  |
| MORE+  | 25.0/25.4mm Optic Dia., 5 Axes Optical Mount | Adjustable - Linear (XYZ) & Tip-Tilt | | #13-776 | £604.00 Request Quote | 2 In Stock <input type="text" value="1"/>  |

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

Resources

Media Type

- Application Note
- Video
- Published Article
- FAQ
- Glossary
- Trending in Optics

APPLICATION NOTE

The Importance of Optical Filter Orientation...

APPLICATION NOTE

Custom Bandpass Filter using Shortpass an...

VIDEO

Optical Filters Review

VIDEO

PUBLISHED ARTICLE

FAQ

Optical Filter
Coatings:
Comparison of
Traditional a...

Selecting Color
Filter Glass for
Life Science
Applications

What type of
material
should I look
for in a filter?

[View More](#)