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# SCHOTT RG-645, 50.8mm Sq., 3mm Thick, Colored Glass Longpass Filter

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Stock #64-514 **CLEARANCE** [CONTACT US](#)

− 1 + £47<sup>00</sup>

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## Product Downloads

## General

Longpass Filter **Type:**

## Physical & Mechanical Properties

50.8 x 50.8 **Dimensions (mm):**

**Length (mm):**

|                      |                                    |
|----------------------|------------------------------------|
| 50.80                |                                    |
| 3.00 ±0.2            | <b>Thickness (mm):</b>             |
| 50.80                | <b>Width (mm):</b>                 |
| ±0.38                | <b>Dimensional Tolerance (mm):</b> |
| Protective as needed | <b>Bevel:</b>                      |

## Optical Properties

|              |   |
|--------------|---|
| 645±8        | <b>Cut-Off Position <math>\lambda_c</math> (nm):</b>    |
| 645.00       | <b>Cut-On Wavelength (nm):</b>                          |
| SCHOTT RG645 | <b>Glass/Filter Number:</b>                             |
| Uncoated     | <b>Coating:</b>   |
| Red          | <b>Color:</b>   |
| 720.00       | <b>Passband Limit 1 <math>\lambda_{p1}</math> (nm):</b> |
| 94.00        | <b>Spectral Transmittance <math>t_p</math> (%):</b>     |
| 560.00       | <b>Stopband Limit <math>\lambda_s</math> (nm):</b>      |
| 80-50        | <b>Surface Quality:</b>                                 |
| VS           | <b>Wavelength:</b>                                      |
| 0.92         | <b>Reflection Factor <math>P_d</math>:</b>              |

## Material Properties

|        |   |
|--------|---|
| 2.65   | <b>Density (g/cm<sup>3</sup>):</b>      |
| 519.00 | <b>Transformation Temperature (°C):</b> |

## Regulatory Compliance

|           |                                    |
|-----------|------------------------------------|
| Exempt    | <b>RoHS 2015:</b>                  |
| Compliant | <b>REACH 201:</b>                  |
| View      | <b>Certificate of Conformance:</b> |

## Product Details

- 27 Standard SCHOTT Color Glass Types
- Cut-On Wavelengths in the UV, Visible, or NIR
- Standard Circular and Square Sizes with 1, 2, or 3mm Thickness

SCHOTT Colored Glass Longpass Filters are available in 27 standard SCHOTT colored glass types, providing cut-on wavelengths in the ultra-violet (UV), visible, or near-infrared (NIR) spectra. The color glass substrates feature high spectral transmittance within their wavelength ranges. SCHOTT Colored Glass Longpass Filters are designed with standard circular and square sizes for easy integration into optical systems and have a 1, 2, or 3mm thickness. Custom sizes from 5 to 160mm are available upon request.

**Note:** Due to supply chain issues, our kits may be delivered with an alternative packaging solution in place of a wooden box. For any questions, please contact [kits@edmundoptics.com](mailto:kits@edmundoptics.com).

### 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 Longpass Filter in dimensions between 5mm and 50mm, please visit our [Colored Filter Glass Tool](#). We'll provide an immediate quote, and we can deliver the part to your requested size in approximately 2 weeks. A full list of standard manufacturing tolerances and restrictions are listed. To find fully customized filters that meet your requirements, visit our [Customized Optical Filter Glass Capabilities](#) page.

## Technical Information



**Quote Your Size**

**Compatible Mounts**

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