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Chalcogenide Glass Window, IRG27, 25.4mm Dia. 3mm Thick

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Stock #72-864 **6 In Stock**

⊖ 1 ⊕ **\$519⁰⁰**

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Qty 1-25	\$519.40 each
Qty 26-49	\$415.80 each
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General

IR Window **Type:**
Delivered in vacuum-sealed packaging **Note:**

Physical & Mechanical Properties

25.40 ± 0.1 **Diameter (mm):**
Thickness (mm):

3.00 ± 0.1

Protective as needed **Bevel:**

Polished **Edges:**

16.8 **Young's Modulus (GPa):**

Optical Properties

Uncoated **Coating:**

SCHOTT IRG27 **Substrate:**

2.4841 @ 1µm
2.4129 @ 5µm
2.3842 @ 10µm **Index of Refraction (n_d):**

60-40 **Surface Quality:**

1000 - 10000 **Wavelength Range (nm):**

<5 λ P-V @ 632.8 **Surface Flatness (P-V):**

Material Properties

3.2 **Density (g/cm³):**

197 **Transformation Temperature (°C):**

22.5 x 10⁻⁶/K (20 - 100°C) **Coefficient of Thermal Expansion CTE (10⁻⁶/°C):**

As₂S₃ **Composition:**

Regulatory Compliance

[View](#) **Certificate of Conformance:**

Product Details

- SCHOTT IRG Infrared Glasses
- Lightweight with Broad Transmission Bands in the SWIR, MMR, and LWMR Spectra
- Ideal Alternative to Germanium

SCHOTT Chalcogenide Glass Windows are suitable for a large range of IR applications and are an ideal alternative to Germanium substrates. Available in 5 different glass types optimized for excellent transmission in the NIR-LWMR ranges, these windows feature low dn/dt and dispersion with high color correction. Low density, coefficient of thermal expansion, and chemical resistance make them a great choice for low SWaP applications and harsh environments with changing temperatures. SCHOTT Chalcogenide Glass Windows are available in a variety of diameters and thicknesses. These windows are ideal for thermal imaging, spectroscopy, and sensing applications.

Note: Gloves must be worn while handling all IRG materials. IRG27 is a toxic material that can be absorbed through the skin. For all IRG materials, care should be taken when handling as these materials are soft and susceptible to scratches. These materials should be stored in a low humidity environment and extended exposure to UV light should be avoided to avoid the development of haziness on the surface of the optic. Contact with high temperatures or strong acids or bases should be avoided.

- IRG22 – Offers excellent transmission in the NIR range. Chemical Formula $Ge_{33}As_{12}Se_{55}$
- IRG24 – Offers a low coefficient of thermal expansion for heat-sensitive applications. Chemical Formula $Ge_{10}As_{40}Se_{50}$
- IRG25 – Offers excellent SWIR, MMR, and LWMR transmission. Chemical Formula $Ge_{28}Sb_{12}Se_{60}$
- IRG26 – Offers an exceptionally broad transmission range, with minimal absorption at 12.5µm. Germanium Free. Chemical Formula $As_{40}Se_{60}$
- IRG27 – Combines a high SWIR/MMR transmission with a low coefficient of thermal expansion. Germanium Free. Chemical Formula As_2S_3

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