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25mm Dia. Ge, IR Holographic Wire Grid Polarizer

25mm Dia. Ge, IR Holographic Wire Grid Polarizer, #62-776

Stock **#62-776** **2 In Stock**

- 1 + **S$2,807**.00

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General

Type:
Linear Polarizer

Note:
Notches on polarizer ring are aligned with wires of wire grid (max. reflection)

Physical & Mechanical Properties

Clear Aperture CA (mm):
18.0

Diameter (mm):
25.00

Parallelism (arcmin):
≤3

Dimensional Tolerance (mm):
±0.2

Construction:
Wire Grid

Groove Parallelism to Edge (°):
N/A

Substrate Thickness (mm):
2.00

Optical Properties

Angle of Incidence (°):
0

Extinction Ratio:
300:1 @ 10.6µm

Substrate:
Germanium (Ge)

Polarization:
Notches on polarizer ring are aligned with wires of wire grid

Transmission (%):
>50

Wavelength Range (nm):
8000 - 17000

Surface Flatness (P-V):
λ/20 @ 10.6 µm

Damage Threshold, By Design:
50 W/cm^2

Groove Density (grooves/mm):
2700.00

Threading & Mounting

Mount Thickness (mm):
5.0 +0.2/-0.1

Ring Thickness (mm):
±0.1

Mount:
Black Anodized Aluminum

Environmental & Durability Factors

Operating Temperature (°C):
-20 to 75

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

REACH 241:
Compliant

Product Details

- Designed for Wavelengths Ranging from 2 - 30µm
- Various Substrates Available
- 360° Rotation Using **Metric Polarizer Mounts**

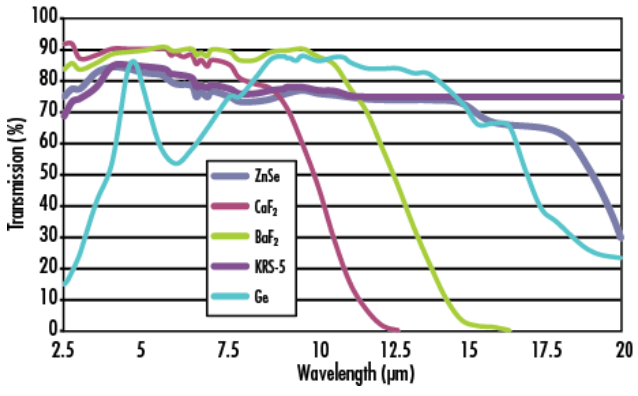
Infrared (IR) Wire Grid Polarizers are used to polarize light from unpolarized infrared laser sources, as well as attenuate light from polarized ones. When two wire grid polarizers are used together, high extinction ratios greater than 40,000:1 can be achieved. The polarization axis of each polarizer is marked by two white lines etched into the surface of its protective ring. Infrared (IR) Wire Grid Polarizers are used in a variety of medical imaging, aerospace, FTIR spectrophotometry, and analytical instrumentation applications.

Infrared (IR) Wire Grid Polarizers are manufactured by a special holographic technique that creates sub-micron wire grid spacing. Compared to conventional ruled wire grid methods, the holographic method creates finer groove spacing which optimizes short wavelength performance. We offer holographic wire grid polarizers of Barium Fluoride (BaF2), Zinc Selenide (ZnSe), Thallium Bromoiodide (KRS-5), and Germanium (Ge).

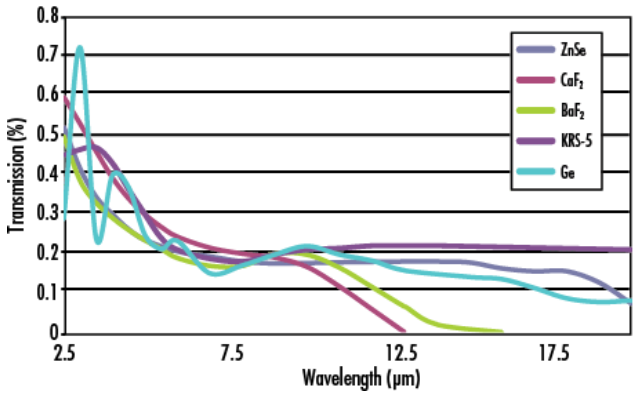
Note: Special care should be taken when handling KRS-5 and Zinc Selenide as they are toxic materials. Always wear rubber or plastic gloves to avoid risk of contamination. The active wire-grid surface of the polarizer is extremely delicate and nothing should be allowed to touch it, as this can damage the optic. Only dry air is recommended as a cleaning method. If necessary, this optic should be handled by the edges only and with protected fingers.

Technical Information

Typical Max Transmission for Linear Polarized Light



Typical Min Transmission for Linear Polarized Light



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

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