

25 or 50 mm support rings. These are provided on Barium Fluoride (BaF₂), Calcium Fluoride (CaF₂), KRS-5, and Zinc Selenide (ZnSe) substrates, and are manufactured at 2500 lines/mm to provide acceptable polarization performance at an economical price.

Economy Polarizers Specifications

Wire Grid Spacing:
2500 lines/mm

Mounting Ring Diameters:

25.0 +0.0/-0.2 mm

50.0 +0.0/-0.2 mm

Mounting Ring Thickness:

5.0 ±0.1 mm (Ø 25 mm)

6.0 ±0.1 mm (Ø 50 mm)

Polarizer Clear Aperture:

18.0 ±0.1 mm (Ø 25 mm)

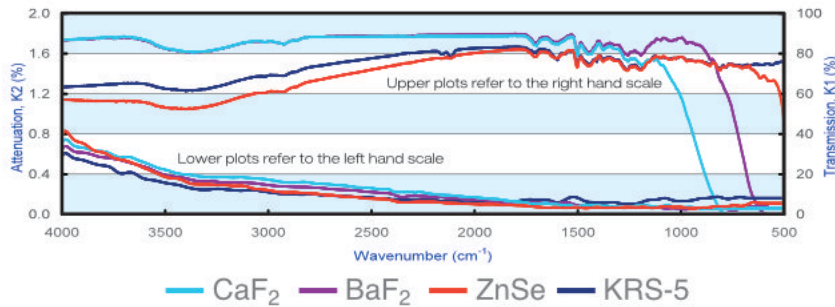
34.0 ±0.1 mm (Ø 50 mm)

Substrate Thickness:

2.0 +0.0/-0.2 mm (Ø 25 mm)

4.0 +0.0/-0.2 mm (Ø 50 mm)

Typical Transmission (K1) and Attenuation (K2) Plots



Polarizer categories

FT-IR Infrared Polarizers

These polarizers are offered on BaF₂, CaF₂, KRS-5, Ge, and ZnSe substrates. Spring mounted with a 25mm clear aperture

Standard Infrared Polarizers

These polarizers are offered on BaF₂, CaF₂, KRS-5, Ge, and ZnSe substrates, in a choice of support rings. Manufactured at 4000 lines/mm, they ensure enhanced performance at shorter wavelengths for precision applications.

High Extinction Ratio (HER) Infrared Polarizers

These polarizers are offered on BaF₂, CaF₂, KRS-5, Ge, and ZnSe substrates, in a choice of support rings. Manufactured at 4000 lines/mm, with an enhanced coating process, they ensure a higher degree of polarization extinction without jeopardising transmission throughput.

Image Quality Infrared Polarizers

These polarizers are offered on Ge and ZnSe substrates, in a choice of support rings. Anti-reflection coatings and a high specification of optical flatness and parallelism make these polarizers well suited for imaging applications.

Substrate Material	Wavelength (µm) / Wavenumber (cm ⁻¹)	Typical Extinction Ratio (K1/K2)
KRS-5	2.5 / 4000	100
	5 / 2000	300
	10 / 1000	300
CaF ₂	2.5 / 4000	100
	5 / 2000	300
	10 / 1000	300
BaF ₂	2.5 / 4000	100
	5 / 2000	300
	10 / 1000	400
ZnSe	2.5 / 4000	100
	5 / 2000	300
	10 / 1000	400

Part Number	Substrate Material	Mounting Ring Dia. (mm)	Parallelism (arc minutes)	Flatness (fringes per inch@633 nm)
GS57500	KRS-5	25	5	4
GS57501	CaF ₂	25	3	2
GS57502	BaF ₂	25	3	2
GS57503	ZnSe	25	3	2
GS57504	KRS-5	50	5	4
GS57505	CaF ₂	50	3	2
GS57506	BaF ₂	50	3	2
GS57507	ZnSe	50	3	2