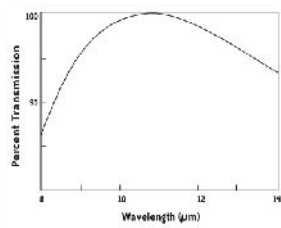


AR Coated Windows

Windows are frequently used in optical systems to separate the environment in one part of the system from another, such as to seal vacuum or high-pressure cells. Because the infrared transmitting material has a high index of refraction, an anti-reflection coating is typically applied to windows to minimize losses due to reflections.

PN	Material	Diameter (mm)	Thickness (mm)
185217	ZnSe	6.35	2.03
568604	ZnSe	9.53	2.03
162879	ZnSe	12.70	2.03
457172	ZnSe	19.05	2.03
735199	ZnSe	25.40	2.03
617035	ZnSe	25.40	3.05
834076	ZnSe	27.94	3.05
184651	ZnSe	38.10	3.05
883636	ZnSe	50.80	5.08
243559	ZnSe	63.50	6.35
616847	ZnSe	76.20	6.35



Dimensional Tolerance	Diameter	+0.000"/-0.005"
	Thickness	+0.005"/-0.010"
Edge Thickness Variation	<= 3 arc minutes	
Clear Aperture (polished)	90% of diameter	
Scratch-Dig	40-20	
AR Reflectivity at 10.6µm	<0.20%	

Brewster Windows

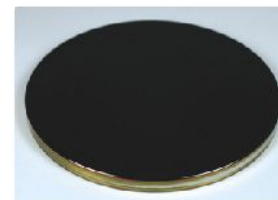
Rectangular Brewster windows are uncoated substrates used in an optical system at Brewster's Angle, the angle at which p reflectance drops to zero. When used in a laser cavity, a Brewster Window causes polarized laser output. For ZnSe, 50% of the incident s-polarized light is reflected per surface. Ge, with a higher index of refraction, has an approximately 87% fresnel reflection of the s-polarization component at 10.6µm.

PN	Material	Width (mm)	Length (mm)	Thickness (mm)
746216	ZnSe	10.16	26.40	2.03
282837	ZnSe	12.70	33.00	2.03
154022	ZnSe	15.24	39.60	2.03
749878	ZnSe	17.78	46.20	2.03
768646	ZnSe	20.32	52.80	3.05
761688	ZnSe	22.86	59.40	3.05
134369	ZnSe	25.40	66.00	3.05
723434	ZnSe	38.10	99.30	4.06
260345	ZnSe	50.80	132.30	5.08

Dimensional Tolerance	Diameter	+0.000"/-0.005"
	Length	+0.000"/-0.005"
	Thickness	+0.005"/-0.010"
Edge Thickness Variation	<= 3 arc minutes	
Clear Aperture (polished)	90% of diameter	
Scratch-Dig	20-10	
AR Reflectivity at 10.6µm	<0.20%	
Brewster angle at 10.6µm	ZnSe: 67.4° Ge: 76.0°	

Protective Windows

PN	Material	Diameter (mm)	Edge Thickness (mm)	Coating Type	Wave-length (µm)
290025	ZnSe	100	5.00	AR	9.3
185594	ZnSe	109	9.53	AR	9.3
355172	ZnSe	111	5.00	AR	9.3
139647	ZnSe	140	9.53	AR	9.3
774352	ZnSe	140	9.53	AR	10.6
221234	Ge	100	5.00	DLC	9.4
425225	Ge	108	5.00	DLC	9.4
221345	Ge	118	5.00	DLC	9.4
505791	Ge	121	5.00	DLC	9.4



Dimensional Tolerance	Diameter	+0.000"/-0.005"
	Thickness	+0.005"/-0.010"
Edge Thickness Variation	<= 3 arc minutes	
Clear Aperture (polished)	90% of diameter	
Scratch-Dig	40-20	
AR Reflectivity at 10.6µm	<0.20%	