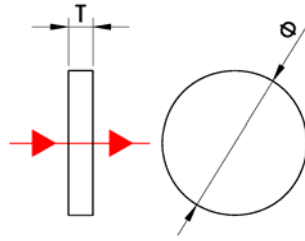


Germanium Window



Germanium is popular for its high index of refraction (around 4.0 from 2-14 μ m). Due to its high index, an antireflection coating is required for sufficient transmission in the region of interest. Our Germanium windows are available from stock with two AR coating options: 3~12 μ m for mid IR or broadband multi-spectral applications, or 8-12 μ m for thermal imaging applications. Germanium is subject to thermal runaway, meaning that the transmission decreases as temperature increases. As such, they should be used at temperatures below 100°C. Germanium's high density (5.33g/cm³) should be considered when designing for weight-sensitive systems. The 8-12 μ m coated Germanium windows are typically used in thermal imaging and FLIR applications. The Knoop Hardness of Germanium (780) is approximately twice that of Magnesium Fluoride, making it ideal for IR applications requiring rugged optics.

Specifications:

Material.....Ge(Optical Grade)
 Clear Aperture.....90% of Diameter
 Diameter Tolerance.....+0.0/-0.1mm
 Thickness Tolerance..... \pm 0.1mm
 Surface Quality.....40-20
 Surface Accuracy..... λ /10@632.8nm
 Parallelism.....<1 arc min
 Coating.....No Coating

P/N	Φ	T
10701	10.00	1.50
10702	12.70	2.00
10703	15.00	2.00
10704	20.00	2.00
10705	25.40	3.00

- Demension unit:mm
- Other sizes and coatings are available upon request.