GERMANIUM (Ge) WINDOWS

Germanium windows used as transparent barriers for sending and receiving light between two phases under varying conditions in temperature, pressure, chemical composition, cleanliness, and phase.

Germanium transmits in the IR range, from $1.8\mu m$ to $23\mu m$, at which Germanium offers higher internal transmittance. Moreover, IR transmitting materials are generally much more expensive than their visible light counterparts so it is very important to select the right material for each specific application.

Non-coated and AR coated products are available.

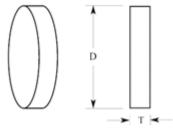
Standard Specifications:

Optical Material: Optical Grade Germanium

Diameter Tolerance: +0.0, -0.1mm
Thickness Tolerance: ± 0.2mm
Clear Aperture: >90%

Parallelism: <3 are minutes
Surface Quality: see the able
Wavefront Distortion: see the table
Bevel: <0.25mm X 45°

Coating: available upon request



Standard Ge Windows

Dia(mm)	Thickness(mm)	Wavefront Distortion	Surface Quality	Product Number
10.0	2.0	Lambda/4	40-20	UQT-WNGH0101
12.7	2.0	Lambda/4	40-20	UQT-WNGH0102
18.0	2.0	Lambda/4	40-20	UQT-WNGH0103
25.4	3.0	Lambda/4	40-20	UQT-WNGH0104
38.10	3.0	Lambda/2	40-20	UQT-WNGH0105

Please Contact ultiQuest for other dimensions in prototype and production quantities.

NOTES!

- Germaium is susceptible to thermal runaway, being non-transmissive at 200°C.
- Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.