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 1.8µm to 23µm, 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**

<table>
<thead>
<tr>
<th>Dia(mm)</th>
<th>Thickness(mm)</th>
<th>Wavefront Distortion</th>
<th>Surface Quality</th>
<th>Product Number</th>
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Please Contact ultiQuest for other dimensions in prototype and production quantities.

**NOTES!**

- Germanium 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.