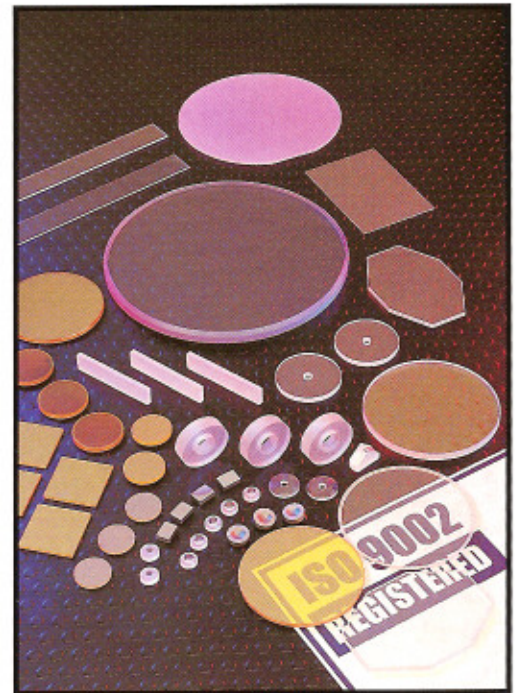


## Laser Quality Sapphire Windows

MSLW Series plane parallel windows are designed for use in critical optical and laser applications where image quality and birefringence effects are important. The raw material has minimal lattice distortion and is oriented with the optic axis normal to the faces to minimize the inherent birefringent properties of single crystal sapphire. Flatness and surface finish are optimized to provide for the least amount of error in the transmitted wavefront. Typical applications include:

- Laser Mirrors
- Laser Beamsplitters
- Laser Output Couplers
- Imaging optics
- Optical Flats & Etalons

We maintain a substantial inventory of these parts and most are available for shipment from stock.



|                                  |  |
|----------------------------------|--|
| <b>Material</b> .....            | Optical Grade single crystal Sapphire                                      |
| <b>Orientation</b> .....         | C-axis perpendicular to the faces  |
| <b>Diameter Tolerance</b> .....  | +0.000" / -.005"   |
| <b>Thickness Tolerance</b> ..... | +/- 0.10mm   |
| <b>Clear Aperture</b> .....      | Central 80% of the diameter  |
| <b>Parallelism</b> .....         | 10 arc seconds   |
| <b>Surface Quality</b> .....     | 60-40 scratch-dig per MIL-O-13830A   |
| <b>Flatness</b> .....            | (1.0"φ or less) λ/10 at 0.633μm<br>(Over 1.0"φ) 1/10 λ per inch at 0.633μm |

| <b>Laser Quality Sapphire Windows</b><br>Insert MSLW Prefix when ordering |            |            |            |            |
|---|------------|------------|------------|------------|
| <b>Thickness (mm)</b>   | <b>2.0</b> | <b>3.0</b> | <b>4.0</b> | <b>5.0</b> |
| <b>Diameter (inches)</b><br><b>0.500"</b>                                 | 050/020M   | 050/030M   |            |            |
| <b>0.750</b>  | 075/020M   | 075/030M   |            |            |
| <b>1.000</b>  |            | 100/030M   |            |            |
| <b>1.500</b>  |            |            | 150/040M   |            |
| <b>2.000</b>  |            |            |            | 200/050M   |

Don't see what you're looking for? Call us for your custom optics needs!