



Optical Quality Sapphire Windows

MSPW series plane parallel sapphire windows are designed for more demanding optical applications where image quality and birefringence effects are important. The raw material has negligible lattice distortion and is oriented with the optical axis normal to the faces to minimize the inherent birefringent properties of single crystal sapphire. Typical applications include:

- Imaging optics
- Polarization sensitive optics
- Short wavelength (UV) optics
- Focusing optics & reticles
- Refractometer windows

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



Material	Optical Grade single crystal Sapphire
Orientation	C-axis perpendicular to the faces
Diameter Tolerance	+0.000" / -0.005"
Thickness Tolerance	+/- 0.1mm
Clear Aperture	Central 80% of Diameter
Parallelism	1 arc minute
Surface Quality	60-40 scratch-dig per MIL-O-13830-A
Flatness	(1.0" ϕ or less) $1/4 \lambda$ at 0.633 μ m (Over 1" ϕ) $1/4 \lambda$ per inch @ 0.633 μ m

Series MSPW Optical Quality Sapphire Windows			
Insert MSPW Prefix when ordering			
Thickness (mm)	1.0	2.0	3.0
Diameter (inches) 0.500	050/0100M	050/020M	050/030M
0.750		075/020M	075/030M
1.000		100/020M	100/030M
1.500		150/020M	150/030M
2.000		200/020M	200/030M

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

120 Corliss Street, Providence, RI 02904 • www.melleroptics.com
(401) 331-3717 • (800) 821-0180 • Fax: (401) 331-0519 • e-mail: sales@melleroptics.com