IVS Sapphire Windows* (*Interferometrically Verified Sapphire)

Optical

Performance: A plane wave shall be distorted no more than ¼ wave in a single pass, verified by HeNe Interferogram**.

Parallelism: Less than one second of arc, verified in Internal Frizeau Fringe Interferogram**

Orientation: Each IVS Sapphire Window is individually x-ray oriented and corrected to within +/- 30 minutes of axis. Actual orientation of each finished window can be supplied to +/- 3 minutes or arc.

Axial/Planar Orientation: Available in Zero Degree (optical axis of the sapphire perpendicular to the window face), or 90 Degree (optical axis in the plane of the window).

** All interferograms are made at 632.8 nm with our Zygo Mark II with 6" aperture, microcomputer data reduction and fringe analysis.

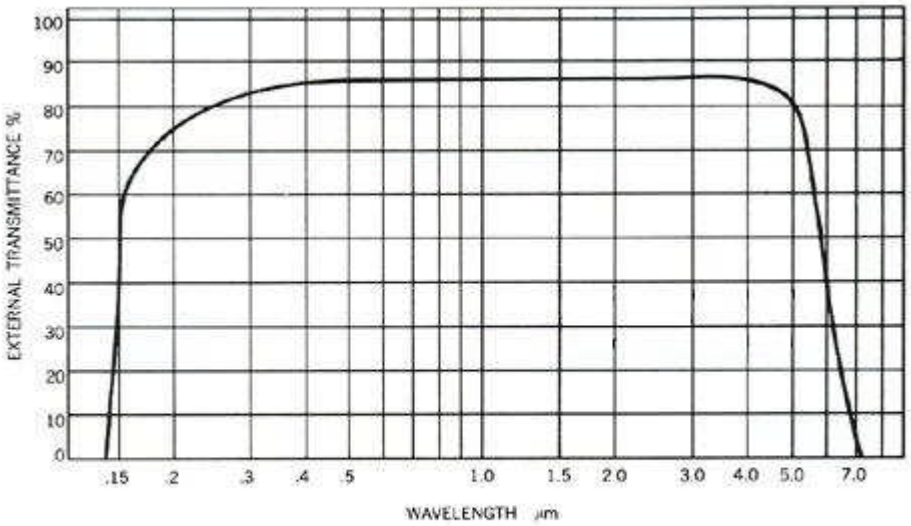
Material Characteristics

Material	Surface Quality	Clear Aperture	Parallelism	Diameter Tolerance	Thickness Tolerance
Optial grade single-crystal sapphire	10-5 Scratch and Dig	85% of overall diameter	Less than 1 second of arc	+0.000"/-0.004" (+0.0 mm/0.1 mm)	+/- 0.004" (+/- 0.1 mm)

IVS Part Numbers

Orientation	Thickness	0.500" diameter	0.750" diameter	1.000" diameter	1.500" diameter	2.000" diameter
90 degree	1.0 mm	IVS-0501-A	IVS-0701-A	IVS-1001-A	IVS-1501-A	IVS-2001-A
	2.0 mm	IVS-0502-A	IVS-0702-A	IVS-1002-A	IVS-1502-A	IVS-2002-A
	3.0 mm	IVS-0503-A	IVS-0703-A	IVS-1003-A	IVS-1503-A	IVS-2003-A
	5.0 mm	IVS-0505-A	IVS-0705-A	IVS-1005-A	IVS-1505-A	IVS-2005-A
	10.0 mm	IVS-0510-A	IVS-0710-A	IVS-1010-A	IVS-1510-A	IVS-2010-A
0 degree	1.0 mm	IVS-0501-C	IVS-0701-C	IVS-1001-C	IVS-1501-C	IVS-2001-C
	2.0 mm	IVS-0502-C	IVS-0702-C	IVS-1002-C	IVS-1502-C	IVS-2002-C
	3.0 mm	IVS-0503-C	IVS-0703-C	IVS-1003-C	IVS-1503-C	IVS-2003-C

	5.0 mm 10.0 mm	IVS-0505-C IVS-0510-C	IVS-0705-C IVS-0710-C	IVS-1005-C IVS-1010-C	IVS-1505-C IVS-1510-C	IVS-2005-C IVS-2010-C



Transmission band of UV Grade Sapphire, 1 mm thickness, uncorrected for Fresnel loss

Boston Piezo-Optics Inc. reserves the right to change specifications without notice.

Questions? *Contact us to discuss your particular application*.