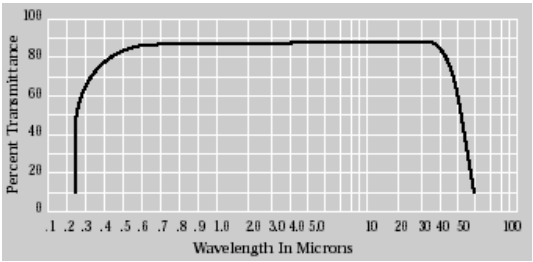
Optical specifications of window materials.

ARS cryostats are available with a large selection of optical windows for UV, Vis and IR experiments.

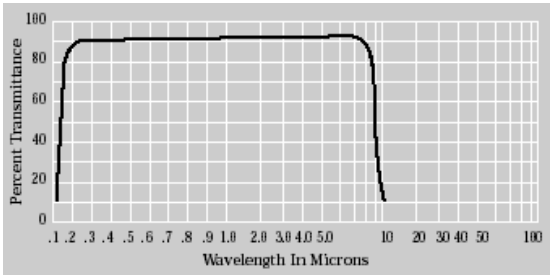
UV - .1 to .3 Microns (100 - 300 Nanometers)
VIS - .3 to 1 Microns (300 to 1000 Nanometers)
IR - 1 + Microns (1000 nanometers)

Cesium Iodide (CsI)



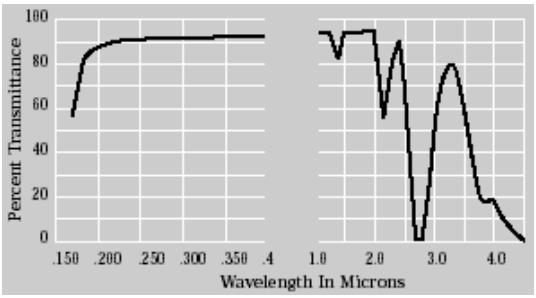
Soluble in water. Extremely hygroscopic.
W-X1-CSI

Calcium Fluoride (CaF2)



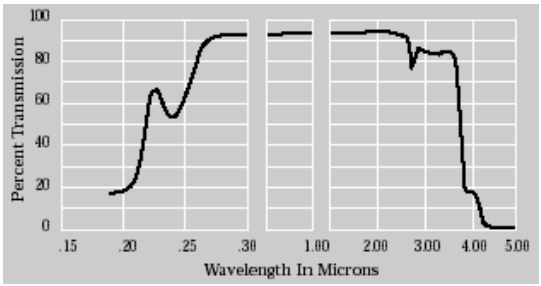
Insoluble in water. Does not fog.
W-X1-CAF

Fused Silica UV grade UV-Vis



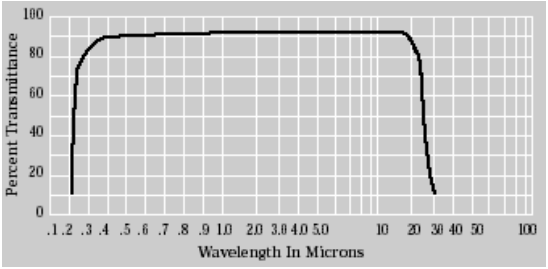
Unaffected by most solvents

Fused Silica IR grade (SiO2)



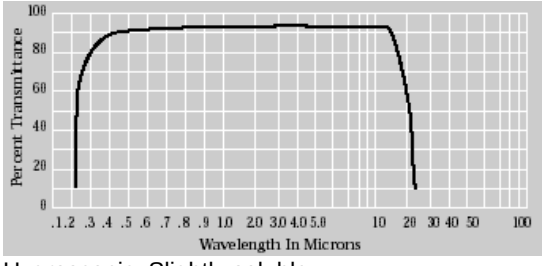
Unaffected by most solvents, Synthetic quartz.
W-X1-SYO

Potassium Bromide (KBr)



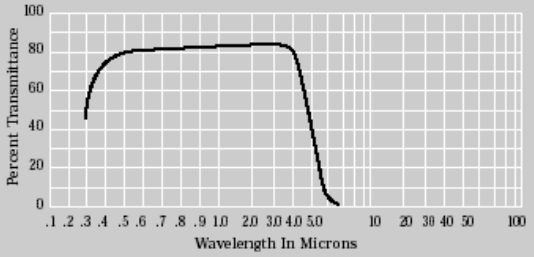
Soluble in water. Hygroscopic. Good resistance to mechanical and thermal shock
W-X1-KBR

Potassium Chloride KCl.



Hygroscopic, Slightly soluble.
W-X1-KCL

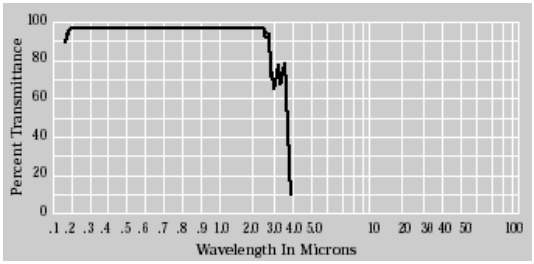
Sapphire (Al2O3)



Hardest and most inert material. Recommended for cold windows.

W-X1-SA

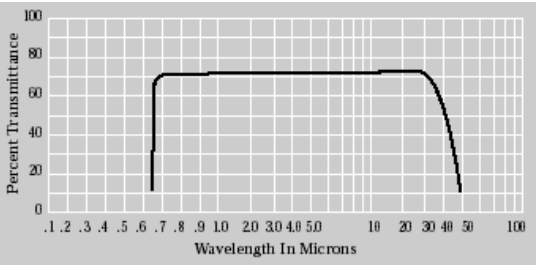
High Purity Quartz (SiO2)



Unaffected by most solvents, useful range- .25-2.5 Microns. (GE124).

W-X1-HPQ

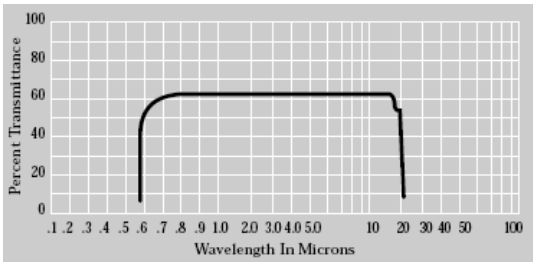
Thallium Bromoiodide (KRS-5)



Slightly soluble in water. Not hygroscopic. Soft, hence easily deformed.

W-X1-KRS

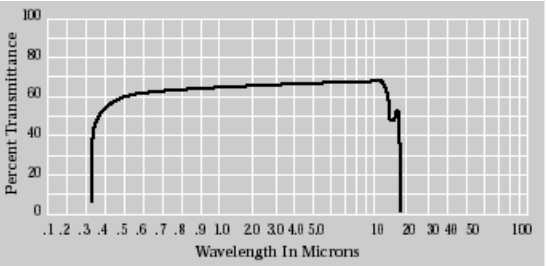
Zinc Selanide (ZnSe)



Insoluble in water, acids and bases.
Laser Grade.

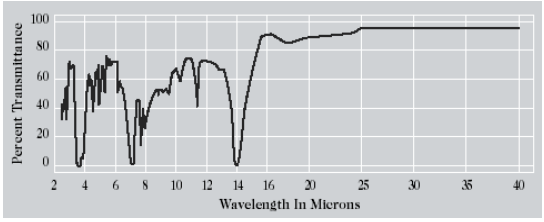
W-X1-ZSE

Zinc Sulphide (ZnS)



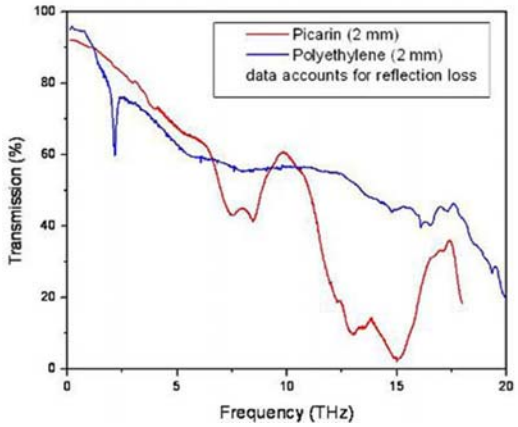
Insoluble in water acids and bases. Reacts to strong oxidizing agents. Good resistance to thermal and mechanical shock

Infrared Plastic - IR



For far IR. Affected by organic solvents.

Picarin & Polyethylene



For TerraHz Spectroscopy Applications.