



CRYSTAL MATERIALS INDEX

Potassium Bromide

Properties	Value
Absorption Coefficient (cm ⁻¹)	5.9x10 ⁻³ at 4.3μ
Apparent Elastic Limit (MPa)	1.1
Bulk Modulus (K) (GPa)	15.03
Cleavage Planes	(100)
Density (g.cm ⁻³)	2.75
Dielectric Constant	4.9 at 1MHz
Elastic Coefficient C11	34.5
Elastic Coefficient C12	5.4
Elastic Coefficient C44	5.08
Hardness (knoop)	7
Melting Point (K)	1003
Poisson Ratio	0.203
Reflection Loss (%)	8.3 at 10μ
Refractive Index	1.53 at 10μ
Reststrahlen Peak (μ)	77.6
Shear Modulus (G) (GPa)	5.08
Solubility (g/100g H ₂ O)	53.48 at 273K
Specific Heat Capacity (J·kg·m ⁻¹ ·K ⁻¹)	435
Stability	Hygroscopic
Structure	Cubic
Thermal Conductivity (W·m ⁻¹ ·K ⁻¹)	4.816 at 319K
Thermal Expansion (K ⁻¹ at 300K)	43X10 ⁻⁶
Transmission Range (μ)	0.23-25
Youngs Modulus (E) (GPa)	26.8

KBr

Potassium Bromide is one of the most useful materials for general purpose spectroscopic windows and applications where sensitivity to moisture is unimportant. KBr is the most commonly used beam splitter material for IR spectrophotometers.

(All data is for information only and believed to be correct. Hilger Crystals does not accept any liability otherwise.)