BARIUM FLUORIDE CRYSTALS [BaF2]

BaF2 is relatively hard but is highly sensitive to thermal shock. For its transmission range is 0.2 μm - 11 μm, the material is used for optical windows, lenses and prisms in UV-IR. Besides it can also be used as substrate for some applications. BaF2 is less resistant to attack by water than CaF2. Pronounced water attack occurs at 500°C, but in a dry environment the material can be used to 800°C. BaF2 is grown by modified Bridgman technique. Maximum available size: Dia 200 mm x Thickness 50mm. In addition, BaF2 is usually used as scintillator for gamma detection. It is the fastest scintillating crystals up to now.

Specification

Maximum Size	Single Crystal: Φ100 × 100 mm Poly Crystal: Φ200 × 100 mm [3 ~7 boundaries]
Dimension Tolerance	± 0.1mm
Flatness Tolerance	λ ~ λ /10 at 632.8 nm over central 90% of edge dimensional
Parallelism	±1 arc sec ~ ±3 arc min
Cosmetic Surface Quality	10 / 5
Specific Heat Capacity	410 J/ [kg K] at 27 °C
Dielectric Constant	7.33 at 2MHz
Young's Modulus [E]	53.07 GPa
Shear Modulus [G]	25.4 GPa
Bulk Modulus [K]	56.4 GPa
Elastic Coefficients	C11=89.2MPa C12=40.0Mpa C44=25.4MPa
Apparent Elastic Limit	26.89 MPa
Poisson Ratio	0.343

TEL: + 86 - 21 - 56746019 Email: sales@sanctitylaser.com FAX: + 86 - 21 - 56641107
Address: 6F, Building 59, No.800 Hulin Road Shanghai China