

BSO Crystals



Description

Bismuth Silicon Oxide $\text{Bi}_{12}\text{SiO}_{20}$ is a pale yellow, photoconductive electro-optic crystal which has found increasingly wide application.

The strong spectral dependence of the photoconductive properties of these crystals and their electrooptic properties makes it possible to develop a wide variety of devices including spatial light modulators, electrooptic sensors, hologram recording devices, phase conjugation, photorefractive incoherent-to-coherent optical converters, pockels readout optical memory (PROM), thin film optical waveguides, photorefracton.

Features

- A wide variety of applications
- High phase conjugation efficiency
- Wide applications including pockels readout optical memory (PROM), thin film optical waveguides, photorefracton and phase conjugation
- Not soluble in water or organic solvents

Miscellaneous

- Custom design production is available
- Mass production available 500 pieces per month

Standard specifications

Transparency range	0.45-6 μm
Crystal symmetry	Cubic, 23
Orientation	110 cut, 100 cut
Density	9.20 g/cm ³
Refractive index	2.54 @ 0.633 μm
Mohs hardness	5
Melting point	900°
Electrooptical coefficient	5.0 (r41) pm/V at 0.633 μm
Dielectric constant (low frequency)	56