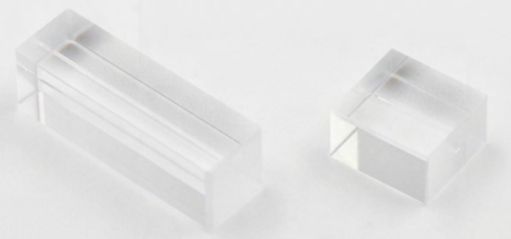
II-VI



Beam Displacer

PRODUCT OVERVIEW

A beam displacer is a rectangular slab made of a birefringent crystal material. The beam displacer exhibits large birefringence when the incidence angle of the light is 0 degrees; it can split an unpolarized light beam into two orthogonally polarized, parallel beams at a certain spacing. The most widely used materials for beam displacers are yttrium vanadate (YVO_4) crystal, barium borate (α-BBO) crystal, calcite crystal, and rutile crystal. Due to the good thermal and mechanical properties and large birefringence of YVO_4, it is the most widely used material for beam displacers. It can be used to produce fiber-optic devices such as circulators, WSS, interleavers, and high-power isolators for fiber lasers.

Beam Displacer

Applications

- WSS
- Isolators
- Circulators
- Interleavers

Product Specifications

Material	YVO4
Typical Dimension	2 x 2 x 7mm, 2.6 x 2.6 x 10mm
O. A. Orientation Tolerance	+/- 0.1
Flatness	λ/10@632.8nm
Wavefront Distortion	λ/4@632.8nm
Surface Quality	(scratch/dig) better than 10-5
Clear Aperture	>90%
AR Coating	R<0.20%@λc+/-40nm, λc=1310, 1550nm

Other sizes, coatings, and orientations of optical axis are available upon request.

Dimensions