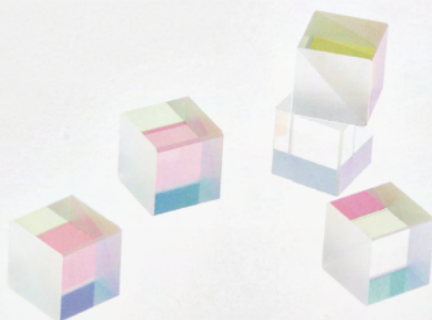


II-VI



# Non-Polarizing Beamsplitter Cube

## PRODUCT OVERVIEW

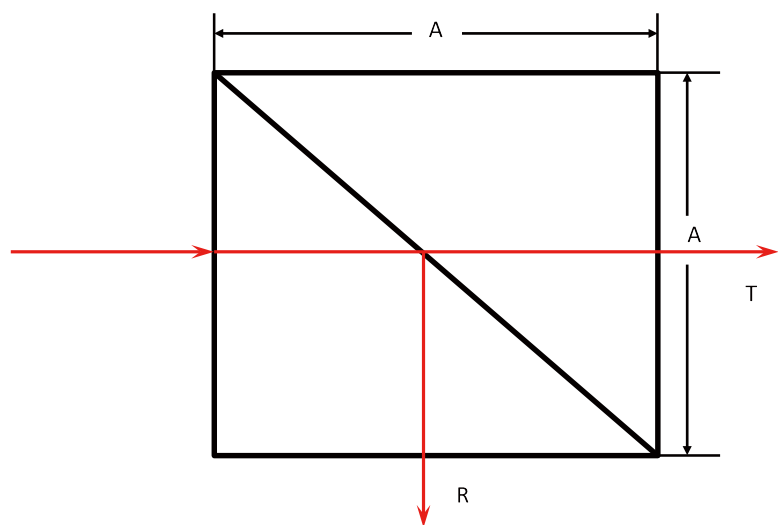
II-VI's non-polarizing beamsplitter (NPBS) cube is composed of a pair of precision high-tolerance right-angle prisms cemented together with a metallic–dielectric coating on the hypotenuse of one of the prisms. The low polarization dependence of the metallic–dielectric coating allows the transmission and reflection of s- and p-polarization states to be within 5% of each other. This means that the NPBS will not need to change the polarization of the incident beam. II-VI can supply both broadband and single wavelength for the NPBS. In order to produce maximum transmission efficiency for the appropriate wavelength range, an antireflective coating can be applied to each face of the beamsplitter.

# Non-Polarizing Beamsplitter Cube

## Applications

- WSS
- Laser applications
- Fiber optical communication systems
- 40G/100G components

## Dimensions



## Common specification

Material	N-BK7 or fused silica
Typical Dimensions	3 mm x 3 mm x 3 mm, 3.2 mm x 3.2 mm x 3.2 mm
Flatness	$\lambda/4$ @ 632.8 nm
Surface Quality	(scratch/dig) Better than 40-20
Beam Deviation	<3 arc minute
Incidence Angle	0 +/-3
Transmission	$T_s = T_p = 50\% \pm 5\%$
Reflection	$R_s = R_p = 50\% \pm 5\%$
Coating	"Non-polarizing beamsplitter coating on hypotenuse; AR coating on other input and output faces"

Other sizes, wedged angles, diameters, and coatings are also available upon request.