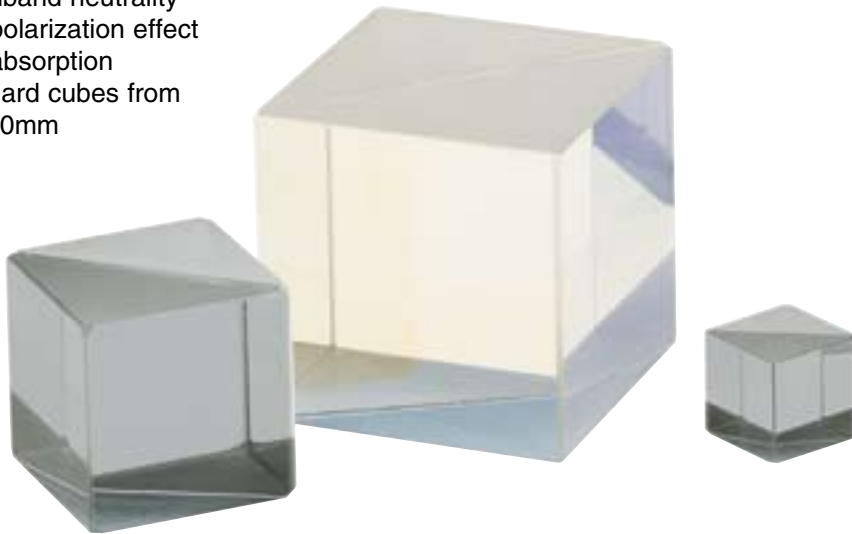


Low-polarizing Cube Beamsplitters

- Metal-dielectric hybrid coatings
- Broadband neutrality
- Low polarization effect
- Low absorption
- Standard cubes from 5 to 20mm



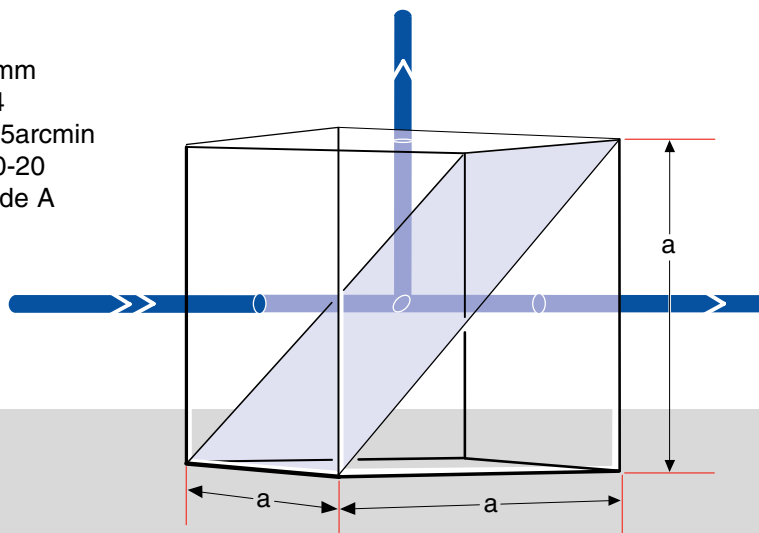
These popular cube beamsplitters use a special combination of metallic and dielectric coatings on the internal splitting face to produce an even split in intensity with minimal polarization and minimal absorption. They make excellent beamsplitters for all but the most demanding applications. Beamsplitting is almost neutral over a broad range of wavelengths. Four wavelength ranges are offered. Two are broadband (400-700 & 600-900) and two are ultra-broadband (400-1000 & 800-1600). The reflected and transmitted beams each contain about 45% of the incoming intensity with only 10% absorbed. Also the s- and p- polarization components are within $\pm 10\%$.

These beamsplitters are made from optical grade BK7. The faces are polished flat to $\lambda/4$ and two like prisms are cemented together to form a cube. Both pairs of sides are parallel to within 5arcmin. The four outer faces are broadband Anti-Reflection coated.

Four standard sizes are offered: 5,10,15 and 20mm. Larger sizes are available on request.

Specifications & Tolerances

R=T: $45\% \pm 10\%$
 Dimensions: $\pm 0.2\text{mm}$
 Prism flatness: $\lambda/4$
 Beam deviation: $\leq 5\text{arcmin}$
 Surface quality: 40-20
 Material: BK7, grade A
 $R_s - R_p < 10\%$



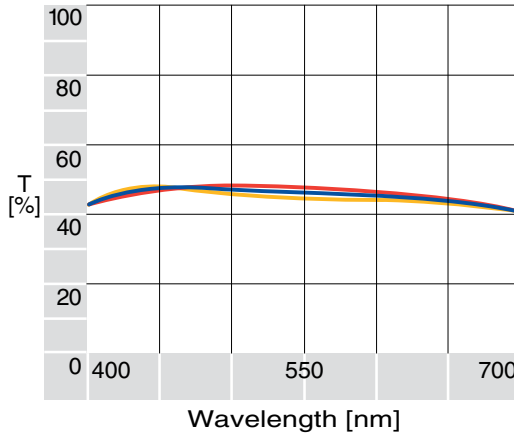
CUBE BEAMSPLITTER

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OPTICAL COMPONENTS

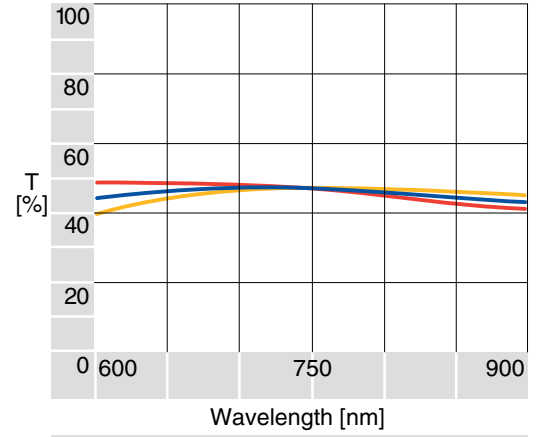
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- Beamsplitters

- Polarizers
- Filter & Apertures



**LOW-POLARIZING BEAMSPLITTER
TRANSMITTANCE 400-700 nm**

Ts ——— Tav ———
Tp ———



**LOW-POLARIZING BEAMSPLITTER
TRANSMITTANCE 600-900 nm**

Ts ——— Tav ———
Tp ———

Low-Polarizing Cube Beamsplitters

Wavelength Range (nm)	Cube Side, a (inches) (mm)	Price	PART NUMBER
400-700	0.20 5.0		039-0230
400-700	0.40 10.0		039-0235
400-700	0.59 15.0		039-0240
400-700	0.79 20.0		039-0245
600-900	0.20 5.0		039-0250
600-900	0.40 10.0		039-0255
600-900	0.59 15.0		039-0260
600-900	0.79 20.0		039-0265

The Low-polarizing Cube Beamsplitters described here are ideal for almost all general purpose applications. By design they make an excellent compromise between non-polarization of metallic splitters and the non-absorption of dielectric splitters.

Larger sizes and additional wavelengths of low-polarizing cube beamsplitters are available on request.



Our cube beamsplitter assembly takes place in a clean room environment to ensure high quality.

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