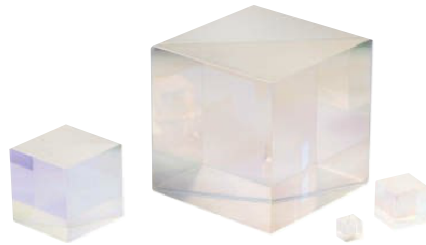


Broadband Non-Polarizing Cube Beamsplitters



- Metal-dielectric hybrid coating
- Even split of laser power
- Broadband and chromatically neutral
- Insensitive to polarization

Our broadband non-polarizing hybrid cube beamsplitters are ideal for use with multiple lasers or tunable lasers. Incoming beams are both transmitted and reflected 45%, with the s- and p-polarized components matched to within 10%. These cube beamsplitters are available in 6.35, 12.7, 25.4, and 50.8 mm sizes for 400-700, 700-1100, and 1100-1600 nm ranges.

Specifications

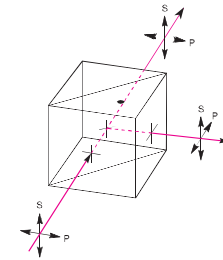
Material	Grade A BK7
Wavefront Distortion	$\lambda/4$ at 632.8 nm over the clear aperture
Clear Aperture	Central diameter, >80% of dimension
Surface Quality	40-20 scratch-dig
Transmission	$T_{s,p} = 45 \pm 5\%$ average, 35% $T_{>s,p}$ 55%
Reflection	$R_{s,p} = 45 \pm 5\%$ average, 35% $R_{s,p}$ 55%
Polarization	S- and P-polarization components matched to within 10%, $ T_s - T_p $ 10%, $ R_s - R_p $ 10%
Absorption	10% average
Transmitted Beam Deviation	5 arc min
Reflected Beam Deviation	$90^\circ \pm 5$ arc min
Angle of Incidence	$0 \pm 5^\circ$
Dimensions Tolerance	± 0.25 mm
Antireflection Coating	Broadband, multilayer coating, R < 0.5%
Temperature Range	-50 to 90 °C
Durability	MIL-M-13508C, MIL-C-675C, MIL-C-14806
Cleaning	Non-abrasive method, acetone or isopropyl alcohol on lens tissue recommended (see page 854) Cemented optic, do not immerse in a solvent
Damage Threshold	100 W/cm ² CW, 0.1 J/cm ² with 10 nsec pulses, typical

Ordering Information

Model	Wavelength Range (nm)	Dimensions (mm)
02BC17MB.1	400-700	6.35
05BC17MB.1	400-700	12.7
10BC17MB.1	400-700	25.4
20BC17MB.1	400-700	50.8
02BC17MB.2	700-1100	6.35
05BC17MB.2	700-1100	12.7
10BC17MB.2	700-1100	25.4
20BC17MB.2	700-1100	50.8
02BC17MB.3	1100-1600	6.35
05BC17MB.3	1100-1600	12.7
10BC17MB.3	1100-1600	25.4
20BC17MB.3	1100-1600	50.8



ULTIMA® Gimbal Prism Mount
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NOTE: To avoid damage, beam must enter prism on the side marked with a dot.

