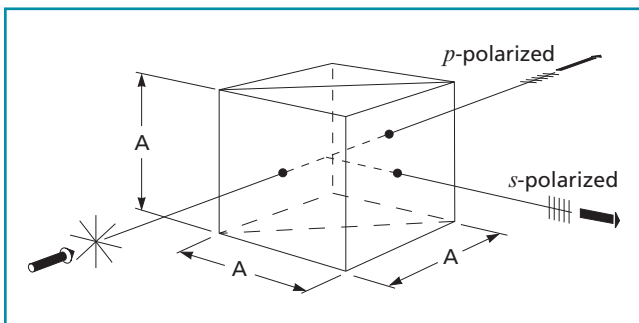


Visible and Near-IR Laser Line Polarizing Cube Beamsplitters

Polarizing beamsplitter cubes are used to split a laser beam into two orthogonally polarized components; *p*-polarization is transmitted straight through while *s*-polarization is reflected at 90°. PBS polarizer cubes utilize a durable all-dielectric coating at the internal cemented interface, and all external surfaces are antireflection coated for the wavelength specified. For best spectral performance and transmitted wavefront, cube beamsplitters should be used with collimated or near-collimated input light. The PBS and other cemented beamsplitter cubes are easy to mount, mechanically durable and ideal for use up to 1 J/cm² at 1064 nm.

To avoid damage when using a high power laser, be sure to orient the cube so that the beam enters through the prism marked with the dot.

- Projection systems, signal monitoring, color separation and recombination, optical coupling
- Fewer ghost images than plate beamsplitters
- Optical isolation (in combination with waveplate)
- Continuously variable beamsplitter (In combination with waveplate)
- Optical adhesive contact
- 1000:1 extinction ratio



PBS laser line polarizing beamsplitter cubes

SPECIFICATIONS: Visible and Near-IR Laser Line Polarizing Cube Beamsplitters

Optical Material	N-BK7 glass
Surface Quality	20-10 scratch and dig
Antireflection Coating	$R \leq 0.25\%$ per surface
Extinction Ratio	$T_p/T_s > 1000:1$
Reflection	$R_s > 99.9\%$
Transmission	$T_p > 95\%$
Transmitted Wavefront Error	$A \leq 1.0$ in.: $\lambda/4$ @ 633 nm $A > 1.0$ in.: $\lambda/2$ @ 633 nm
Field of View	$\pm 3^\circ$
Clear Aperture	$\geq 85\%$ of central dimension
Damage Threshold	
Pulsed	1 J/cm ² , 20 ns, 20 Hz @ 1064 nm
cw	100 W/cm ² @ 515 nm

From our Shelves to Your Lab –
Standard Products for Fast Delivery

Standard Laser Line Polarizing Cube Beamsplitters

Wavelength (nm)	A (mm)	PART NUMBER
12.7 mm Cube		
532	12.7	PBS-532-050
633	12.7	PBS-633-050
670	12.7	PBS-670-050
780	12.7	PBS-780-050
800	12.7	PBS-800-050
810	12.7	PBS-810-050
830	12.7	PBS-830-050
850	12.7	PBS-850-050
1030	12.7	PBS-1030-050
1047	12.7	PBS-1047-050
1064	12.7	PBS-1064-050
1550	12.7	PBS-1550-050
25.4 mm Cube		
532	25.4	PBS-532-100
670	25.4	PBS-670-100
780	25.4	PBS-780-100
800	25.4	PBS-800-100
1064	25.4	PBS-1064-100