

Laser Line Beamsplitting Polarizers

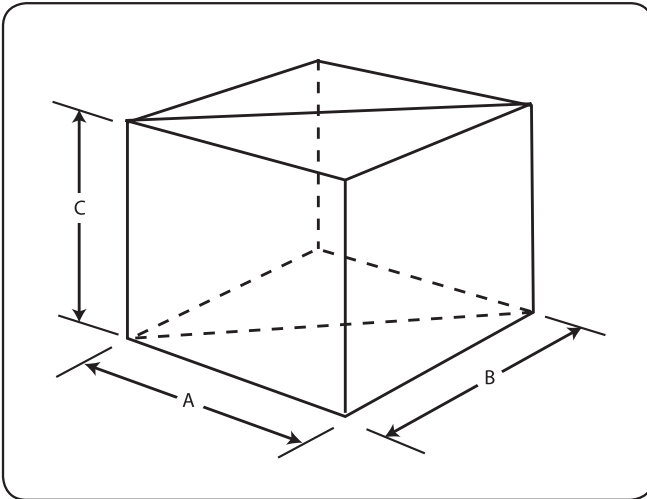


Fig. 1-18 Beamsplitting polarizers provide two orthogonally polarized beams, conveniently separated by 90°

PROBLEM

"How can I find precisely the polarization axis of a polarizer?"

SOLUTION

The polarization direction is marked on all mounted and unmounted polarizers we sell. For a more precise determination, use a laser line beamsplitting polarizer. The transmitted linear polarization direction lies precisely in the plane defined by the incident and reflected laser beams.

SPECIFICATIONS	
Material	BK 7 Grade A, fine annealed
Transmitted Wavefront Distortion (at 632.8 nm)	$\leq \lambda/5$ for p-polarized beam
Contrast Ratio	
Transmitted	$\geq 500:1$
Reflected	$\geq 20:1$
Efficiency	
p-polarized light	$\geq 95\%$ transmitted
s-polarized light	$\geq 99\%$ reflected
Clear Aperture	Central 80% diameter
Reflectance (per surface)	$\leq 0.25\%$ at normal incidence
Surface Quality	40-20 scratch and dig
Beam Deviation	
Transmitted	≤ 3 arc min
Reflected	≤ 6 arc min
Acceptance Angle	$\pm 2^\circ$
Standard Wavelengths:	532, 632.8, 670, 780, 850, 1064 and 1550 nm
Dimensional Tolerance	± 0.020 in.
Temperature Range	-40°C to $+100^\circ\text{C}$
Recommended Safe Operating Limit	500 W/cm ² , CW 300 mJ/cm ² , 10 ns, visible 200 mJ/cm ² , 10 ns, 1064 nm

ORDERING INFORMATION

Dimensions $A = B = C$ (in.)	Part Number
0.50	BP - 050 - λ
1.00	BP - 100 - λ

Please substitute your wavelength in nanometers for λ .

Custom sizes and wavelengths, over 400-1600 nm are available.
Call us for pricing on nonstandard wavelengths or sizes.