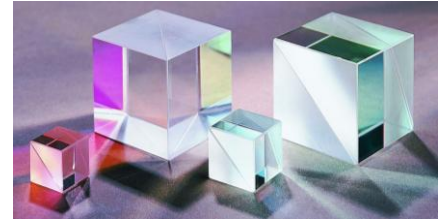
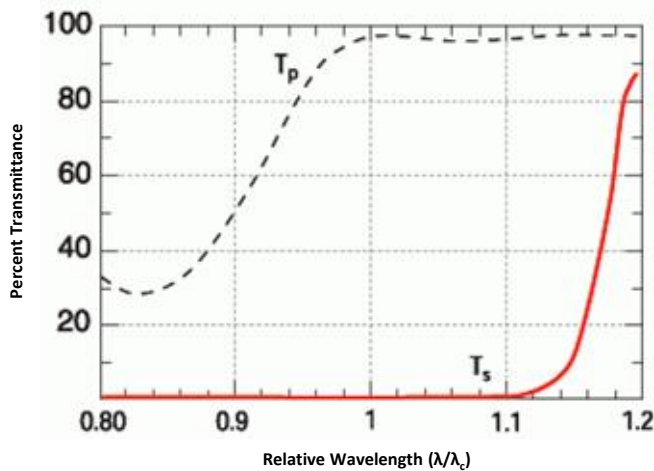


Laser Line Beamsplitting Polarizer

Right-angle prisms are matched in pairs to produce high quality laser line beamsplitting polarizers with superior wavefront quality in both transmission and reflection. The hypotenuse face of one prism is coated with a multilayer dielectric beamsplitting coating optimized for laser performance. Two prisms are cemented together, protecting the critical coating from performance-degrading environmental factors. Each cube separates an unpolarized incident beam into two orthogonal, linearly polarized components with negligible absorption. Following the principle of pile-of-plates polarizers, p-polarized light is transmitted with approximately 1000:1 contrast. These polarizers perform best with collimated or near-collimated light.

Typical Performance of a Laser Line Beamsplitting Polarizer



Key Features

• • •

High contrast

Low reflectance

Low transmitted wavefront distortion

Polarization Suite

• • •

Linear Polarizers

Precision Linear Polarizer

High Contrast Linear Polarizer

Ultra-High Contrast Linear Polarizer

Glan-Thompson Polarizer

Ultra Broadband Polarizer

MWIR Polarizer

Deep Ultraviolet Polarizer

Beamsplitting Polarizers

Wire Grid Versalight Polarizer

Wire Grid Versalight Beam Splitter

Laser Line Beamsplitting Polarizer

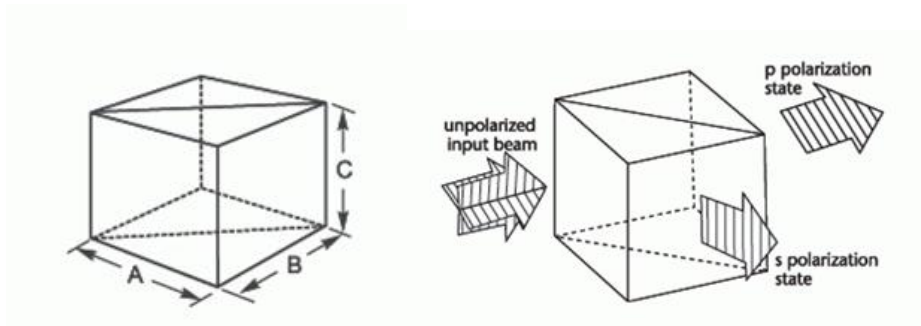
Broadband Beamsplitting Polarizer

Polarizing Bandpass Filter

Circular Polarizers

Dichroic Circular Polarizer

Beam Separator



Beamsplitting polarizers provide two orthogonally polarized beams, conveniently separated by 90°



| SPECIFICATIONS | |
|--------------------------------------|--|
| Substrate | N-BK7 |
| Surface Flatness (P-V @ 632.8 nm) | $\leq \lambda/4$ for p-polarized beam |
| Surface Quality | 40 – 20 scratch-dig |
| Beam Deviation | |
| Transmitted | ≤ 3 arc-min |
| Reflectance (per surface) | $\leq 0.25\%$ |
| Contrast Ratio | |
| Transmitted | $\geq 1,000:1$ |
| Transmission | |
| p-polarized light | $\geq 95\%$ transmitted |
| s-polarized light | $\geq 99.8\%$ reflected |
| Storage Temperature | -50°C to + 80°C |
| Operating Temperature | -50°C to + 80°C |
| Laser Damage Threshold | ≥ 0.5 J / cm ² , 10 ns |

| ORDERING INFORMATION | |
|--|----------------------|
| Dimensions ± 0.020 in. (± 0.51 mm) | Part Number |
| 0.50 × 0.50 × 0.50 (12.7 × 12.7 × 12.7 mm) | BP – 050 – λ |
| 1.00 × 1.00 × 1.00 (25.4 × 25.4 × 25.4 mm) | 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, sizes, or shapes.