

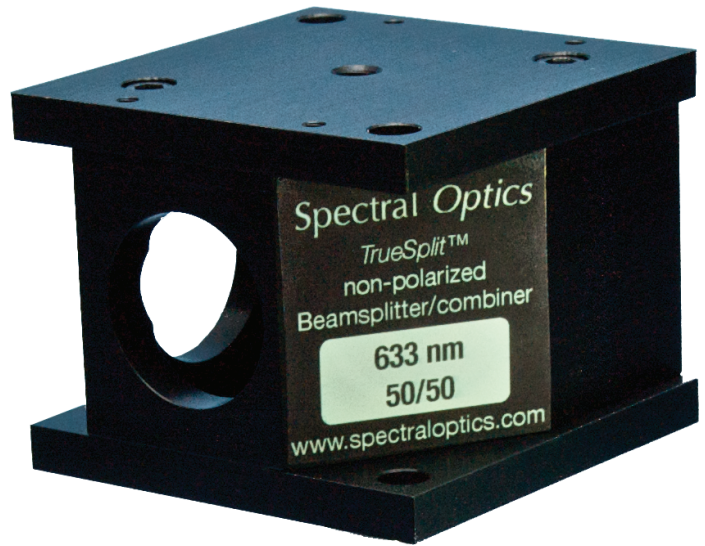
Spectral Optics

*The new standard in optical coatings
and coated optical components*

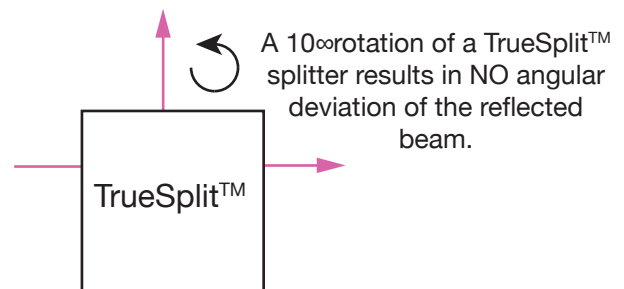
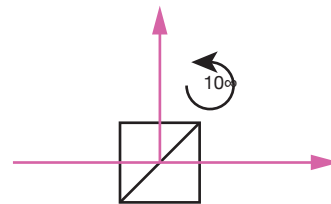
a division of
SPECTRAL PRODUCTS, LLC

TrueSplit™ Non-Polarized Beamsplitter/combiner

TrueSplit™ is a breakthrough in beam-splitter technology. While most non-polarizing beamsplitters require hybrid metallic coatings or cemented interfaces which absorb energy, TrueSplit™ has only hard dielectric coatings and no bonded interfaces. As a result, it achieves <3% P-S polarization performance with almost no absorption, and has a damage threshold > 20J/cm². Furthermore, this can be realized with almost any R/T ratio (not just 50/50) and almost any wavelength.



- Clear Aperture > 5/8 inch
- Beam height 1 inch above base
- 2 ½ inch square footprint: base mount on 2 inch centers or post mount on -20 thread (Metric option available)
- Reversible to allow left- or right-reflection
- Stock coatings available for 193 nm to 2.0 μ m
- Custom wavelengths available on request



The TrueSplit™ beamsplitter/combiner has intrinsic angular stability.

Optical Specifications

Polarization: $|P - S| < 2.5\%$

Ratio Tolerance: $\pm 2\%$ Std
($\pm 1\%$ can be achieved)

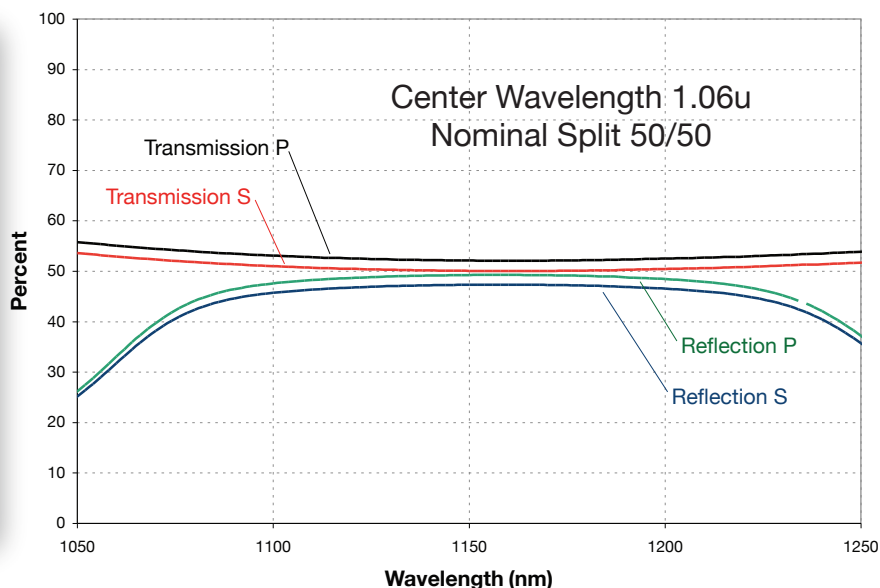
Wavefront Error: $< \lambda/10$ 633nm
(depending on beam size)

Power Handling: $> 20 \text{ J / cm}^2$

Reflection Angle: $90^\circ \pm 1^\circ$

Wavelength Choice: 193nm-1.2u

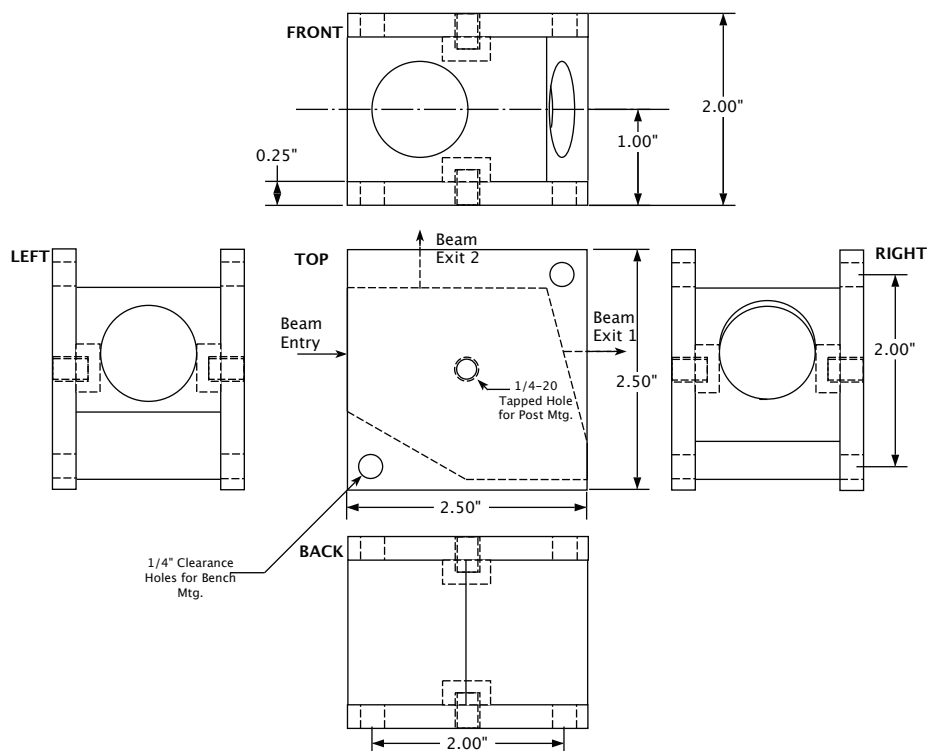
Typical Performance



Post Mounted



Mechanical



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