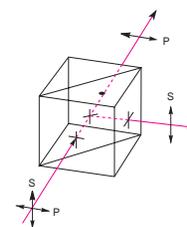


# Polarizing Cube Beamsplitters



- High extinction ratios
- Low wavefront distortion
- Standard 12.7 and 25.4 mm sizes easily mount in Newport holders
- A variety of products to meet specific applications

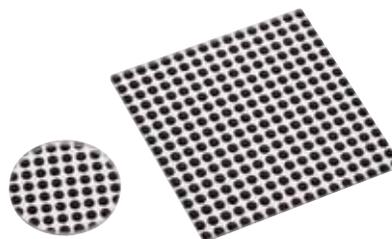
Newport offers a variety of polarizing cube beamsplitters to provide solutions for your application, including: broadband, UV laser line, laser line, and high-energy Nd:YAG laser polarizing cube beamsplitters. Each beamsplitter consists of a pair of precision right-angle prisms carefully cemented together to minimize wavefront distortion (except our high-energy Nd:YAG cubes, which are optically contacted). Our polarizing cube beamsplitters are offered in 12.7 mm and 25.4 mm sizes. For more information see page 577.



NOTE: To avoid damage, beam must enter prism on the side marked with a dot.

# Polka Dot Beamsplitters

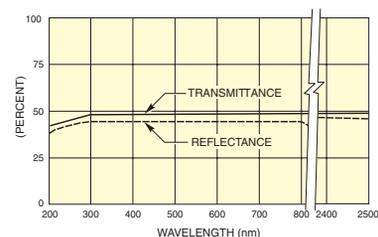
- 50% reflectance, 50% transmission from 250 to 2500 nm
- Insensitive to angle of incidence changes
- 1" diameter round or 2" square sizes
- Ideal for white light illumination applications



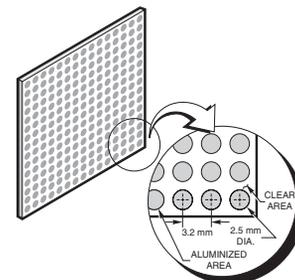
Our 50/50 Polka Dot Beamsplitters are UV fused silica substrates coated with aluminum and SiO protective overcoat in a "polka dot" pattern. Optimized for white light illumination applications, they provide two unique advantages over traditional dielectric beam splitters: they are neutral over the wavelength range of the fused silica substrate and the aluminum coating, and they are not sensitive to angle of incidence changes.

## Specifications

Material	UV grade fused silica
Coating	Al(SiO)
Size tolerance	+0/-0.25 mm
Thickness	1.6 mm, ±0.20 mm
Edge Finish	Ground and beveled
Surface Quality	60-40 scratch-dig
Surface Flatness	1 $\lambda$ wave both sides @ 632.8 nm
Parallelism	30 arc sec (0.15 mrad)
Min beam size for 50/50 split	0.37 inch (9.5 mm) diameter
Usable aperture	All but a 3 mm outer rim
R/T ratio	50/50, ±5% @ 500 nm
Acceptance angle	0° to 45°
Maximum temperature	150°C



Transmittance/Reflectance of Polka Dot Beamsplitters



Pattern of Polka Dot Beam Splitters

## Ordering Information

Model	Dimensions (mm)
PDOT-1	25.4 $\phi$
PDOT-2	50.8 x 50.8