

Optics

Optical Systems

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Cylindrical Lenses

Aspheric Lenses

Mirrors

Diffusers & Lens Arrays

Windows

Prisms

Gratings

Polarization Optics

Beamsplitters

Filters & Attenuators

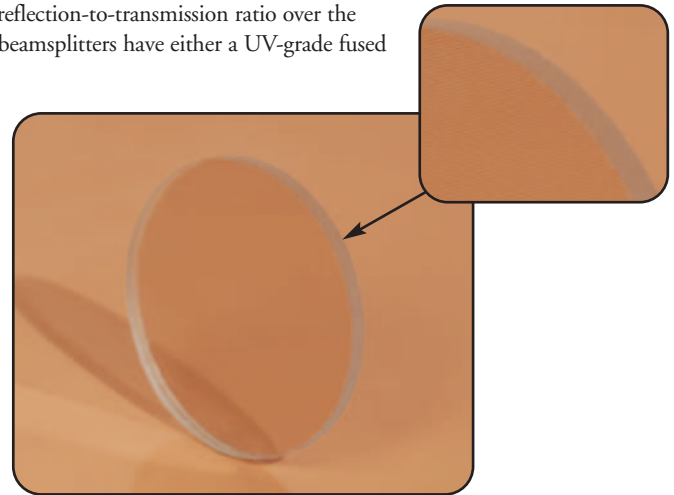
Gas Cells

Polka Dot Beamsplitters

Thorlabs offers a 50/50 broadband beamsplitter with a constant reflection-to-transmission ratio over the entire UV to Mid-IR (250nm to 2.0 μ m) wavelength range. The beamsplitters have either a UV-grade fused silica or a B270 glass substrate with a vacuum-deposited aluminum coating.

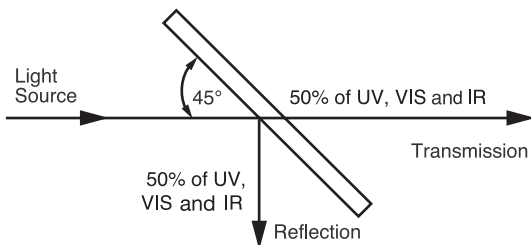
The aluminum coating is applied over an array of apertures, giving the beamsplitter a "polka dot" appearance. Thus, the beam is split evenly by reflection from the aluminized coating and transmission through the non-aluminized portion of the substrate. The square dots are 0.0040" on a side, and the spacing between the dots is 0.0022" in all directions.

This versatile beamsplitter is useful over a wide wavelength range and is relatively insensitive to the incident angle of the light. As a result, the Polka Dot beamsplitter is an excellent choice for applications that involve incoherent radiant sources.

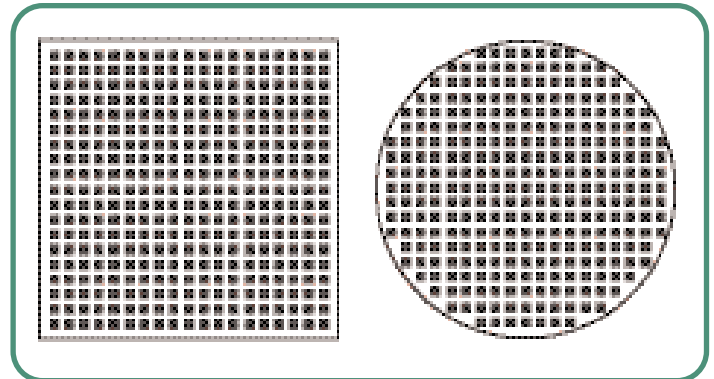


Specifications

- **Beam Split Ratio:** 50 \pm 5% R, 50 \pm 5% T
- **Minimum Beam Diameter for 50/50 Split:** 2mm
- **Operating Range:** 250nm to 2.0 μ m
- **Coating Pattern:** Square Coated Apertures
- **Substrate:** UV-Grade Fused Silica or B270 Glass
- **Thickness:** 1.5mm Nominal
- **Size Tolerance:** +0.0mm /-0.5mm
- **Angle of Incidence:** 0-45°



Broadband 50/50 Beamsplitter
45° Angle of Incidence



ITEM#	\$	£	€	RMB	DESCRIPTION
BPD127-G	\$ 56.70	£ 35.70	€ 52,70	¥ 541.50	Polka Dot Beamsplitter, Ø12.7mm, B270 Glass
BPD127-FS	\$ 82.40	£ 51.90	€ 76,60	¥ 786.90	Polka Dot Beamsplitter, Ø12.7mm, UV Fused Silica
BPD254-G	\$ 97.90	£ 61.70	€ 91,00	¥ 934.90	Polka Dot Beamsplitter, Ø25.4mm, B270 Glass
BPD254-FS	\$ 154.50	£ 97.30	€ 143,70	¥ 1,475.50	Polka Dot Beamsplitter, Ø25.4mm, UV Fused Silica
BPD254S-G	\$ 97.90	£ 61.70	€ 91,00	¥ 934.90	Polka Dot Beamsplitter, 25.4mm Square, B270 Glass
BPD254S-FS	\$ 154.50	£ 97.30	€ 143,70	¥ 1,475.50	Polka Dot Beamsplitter, 25.4mm Square, UV Fused Silica
BPD508-G	\$ 257.50	£ 162.20	€ 239,50	¥ 2,459.10	Polka Dot Beamsplitter, Ø50.8mm, B270 Glass
BPD508-FS	\$ 463.50	£ 292.00	€ 431,10	¥ 4,426.40	Polka Dot Beamsplitter, Ø50.8mm, UV Fused Silica

See Our Line of
Fiber Coupled
Laser Sources
See Pages 566-568

