

Plate Polarizing Beamsplitters | PBS-C

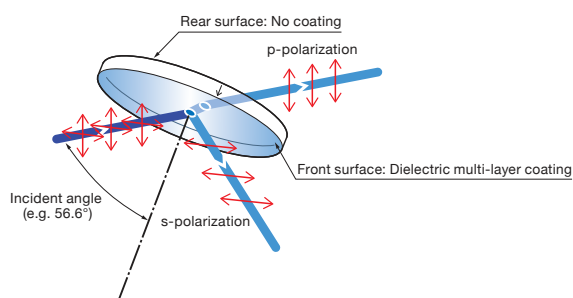
RoHS

Plate polarizing beamsplitters are a plate that is coated with a polarizing coating.

- Plate polarizing beamsplitters transmit p-polarization and reflect s-polarization as the monochromatic beam entering is at Brewster's angle.
- The losses of input beam of these products are minimized because of no absorption of dielectric coating.
- Coating characteristic are not influenced marginally by temperature change.

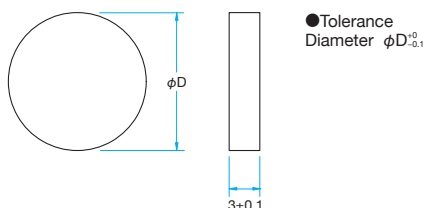


Schematic



Outline Drawing

(in mm)



Specifications

Material	BK7, Synthetic fused silica
Surface flatness of substrate	$\lambda/10$
Extinction ratio of transmission	$T_s : T_p = 1 : 200$
Beam Deviation	$<5''$
Coating	Front surface: Dielectric multi-layer polarization coating Rear surface: No coating
Surface Quality (Scratch-Dig)	10-5
Clear aperture	90% of the diameter

Guide

- ▶ Please contact our Sales Division for customized products. (Customized on size, wavelength, extinction ratio etc.)
- ▶ If the surface accuracy is required after coating, please contact our Sales Division.

Attention

- ▶ The surface flatness is the reflected wavefront distortion of the surface before coating.
- ▶ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.
- ▶ Rear surface has no coating.

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266nm – 1064nm

Part Number	Wavelength Range [nm]	Diameter ϕD [mm]	Maximum diameter of transmitted beam [mm]	Material	Incident angle [°]	Transmittance of P polarized light [%]	Reflectance of S polarized light [%]	Laser Damage Threshold* [J/cm ²]
PBS-20C03-10-266	266	$\phi 20$	$\phi 10.0$	Synthetic fused silica	56.3	>92	>95	2
PBS-25.4C03-10-266	266	$\phi 25.4$	$\phi 12.7$	Synthetic fused silica	56.3	>92	>95	2
PBS-30C03-10-266	266	$\phi 30$	$\phi 15.0$	Synthetic fused silica	56.3	>92	>95	2
PBS-20C03-10-355	355	$\phi 20$	$\phi 10.1$	Synthetic fused silica	55.9	>94	>95	2
PBS-25.4C03-10-355	355	$\phi 25.4$	$\phi 13.1$	Synthetic fused silica	55.9	>94	>95	2
PBS-30C03-10-355	355	$\phi 30$	$\phi 15.7$	Synthetic fused silica	55.9	>94	>95	2
PBS-20C03-10-532	532	$\phi 20$	$\phi 9.9$	BK7	56.6	>95	>98	5
PBS-25.4C03-10-532	532	$\phi 25.4$	$\phi 12.9$	BK7	56.6	>95	>98	5
PBS-30C03-10-532	532	$\phi 30$	$\phi 15.4$	BK7	56.6	>95	>98	5
PBS-20C03-10-1064	1064	$\phi 20$	$\phi 10.0$	BK7	56.4	>96	>98	7
PBS-25.4C03-10-1064	1064	$\phi 25.4$	$\phi 12.9$	BK7	56.4	>96	>98	7
PBS-30C03-10-1064	1064	$\phi 30$	$\phi 15.5$	BK7	56.4	>96	>98	7

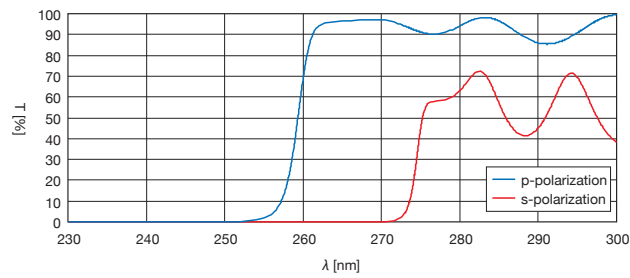
* Incident angle 0°, Laser pulse width 10ns, repetition frequency 20Hz



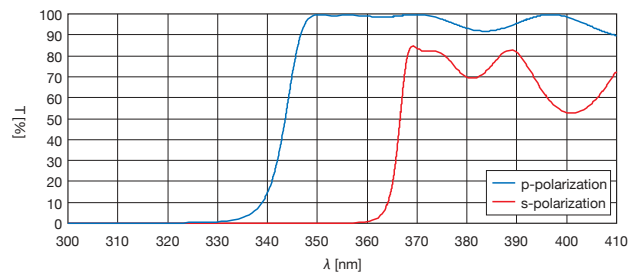
Typical Transmittance Data

T: Transmission

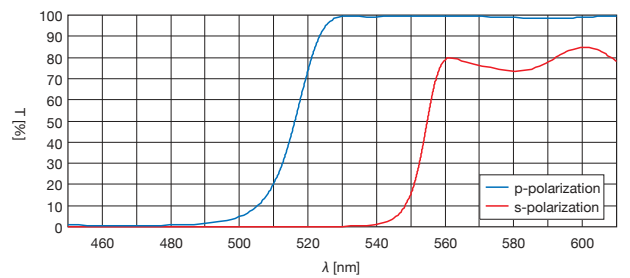
PBS-C-266



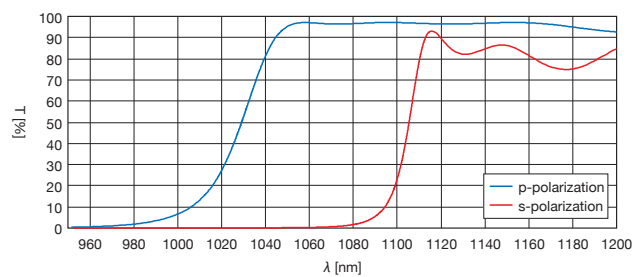
PBS-C-355



PBS-C-532



PBS-C-1064



Compatible Optic Mounts

MHG-MP20 / MHG-MP25 / MHG-MP30

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