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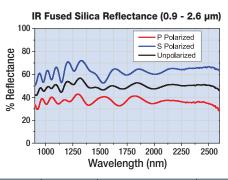
IR Fused Silica Plate Beamsplitters: 0.9 - 2.6 µm

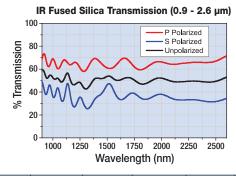


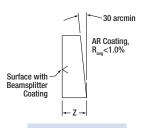
IR fused silica contains a much lower water content than UV fused silica, thereby limiting the effects of $\rm H_2O$ absorption lines at 2.2 μm and 2.6 μm and making it a more suitable substrate for transmitting IR light. Thorlabs' 50:50 IR Fused Silica Broadband Beamsplitters, available in Ø1/2", Ø1", and Ø2"sizes, feature a 0.9 – 2.6 μm beamsplitter coating optimized for an incidence angle of 45°. To limit unwanted interference effects and ghost images created by light reflecting from the back surface of the optic, an AR coating has been applied to the back surface to reduce the average reflectance to less than 1%, while a 30 arcmin wedge with respect to the front surface causes the surface reflections to diverge.

Specifications

- Three Sizes: Ø1/2", Ø1", Ø2"
- AR Coating Range: 0.9 2.6 μm
- Clear Aperture: >90% of Diameter
- Flatness: λ/4 for Ø1/2", λ/2 for Ø1" λ for Ø2"
- Surface Quality: 20-10 Scratch-Dig
- Splitter Ratio Tolerance: ±10%
- **Diameter Tolerance:** +0.0/-0.2 mm
- Wedge: 30 ± 10 arcmin
- Durability: MIL-M-13508C, MIL-C-675C, MIL-C-14806







Shaded Region Corresponds to AR Coating Range

1	ITEM #	DIAMETER	SPLITTER RATIO (T:R)	THICKNESS (Z)	\$	£	€	RMB	SUGGESTED MOUNT
ı	BSW22	1/2"	50:50	3 ± 0.4 mm	\$ 242.00	£ 174.24	€ 210,54	¥ 1,928.74	LMR05 (See Page 268)
1	BSW23	1"	50:50	5 ± 0.4 mm	\$ 272.00	£ 195.84	€ 236,64	¥ 2,167.84	LMR1 (See Page 268)
ı	BSW24	2"	50:50	8 ± 0.4 mm	\$ 305.00	£ 219.60	€ 265,35	¥ 2,430.85	LMR2 (See Page 268)

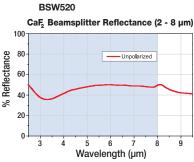
CaF₂ Plate Beamsplitters: 2 - 8 μm

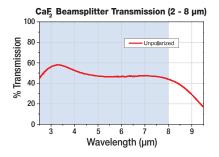


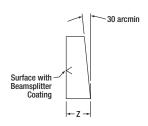
Thorlabs' Calcium Fluoride Plate Beamsplitters, available in $\emptyset 1/2$ ", $\emptyset 1$ ", and $\emptyset 2$ "sizes, are designed to be used at a 45° angle of incidence. The 50:50 beamsplitter coating is optimized for light in the 2 – 8 µm spectral region. To limit unwanted interference effects created by light reflected from the back surface of the optic, the back surface is wedged at 30 arcmin with respect to the front surface, causing the reflections to diverge.

Specifications

- Three Sizes: Ø1/2", Ø1", Ø2"
- Clear Aperture: >90% of Diameter
- **Flatness:** λ/4 @ 633 nm
- Surface Quality: 80-50 Scratch-Dig
- Splitter Ratio Tolerance: ±15%
- Durability: MIL-M-13508C, MIL-C-675C, MIL-C-14806







Shaded Region Corresponds to Specified Range

ITEM #	DIAMETER	SPLITTER RATIO (T:R)	THICKNESS (Z)	\$	£	€	RMB	SUGGESTED MOUNT
BSW505	1/2"	50:50	3 ± 0.4 mm	\$ 250.00	£ 180.00	€ 217,50	¥ 1,992.50	LMR05 (See Page 268)
BSW510	1"	50:50	5 ± 0.4 mm	\$ 280.00	£ 201.60	€ 243,60	¥ 2,231.60	LMR1 (See Page 268)
BSW520	2"	50:50	8 ± 0.4 mm	\$ 380.00	£ 273.60	€ 330,60	¥ 3,028.60	LMR2 (See Page 268)