

LASER REAR MIRRORS

High reflectivity ($R > 99.8\%$) dielectric coatings with high laser damage threshold are applied on laser rear mirrors. UV FS substrates are recommended for high power laser applications.

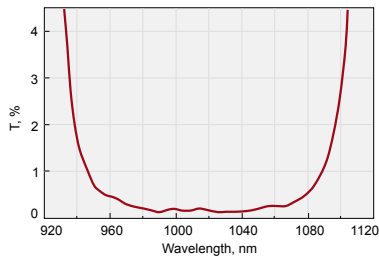
Back side can be AR coated to avoid back reflection from second surface on request.

SUBSTRATE

Material	UV grade Fused Silica or BK7 glass
S1 Surface Flatness	
S1 Surface Quality	20–10 scratch & dig (MIL-PRF-13830B)
S2 Surface Quality	Commercial polish
Diameter Tolerance	+0.00 mm-0.12 mm
Thickness Tolerance	± 0.25
Chamfer	0.3 mm at 45° typical

COATING

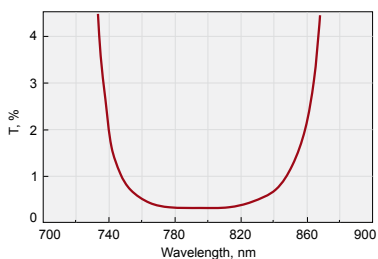
Technology	Electron beam multilayer dielectric
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Angle of Incidence	0–8° (normal)
Coating	Hard dielectric High Reflection $R > 99.8$
Laser Damage Threshold	> 100 mJ/cm ² , 50 fsec pulse, 800 nm typical



$HR > 99.8\%$ @ 1030 \pm 30 nm, AOI=0°

Wave-length, nm	Substrate type	Radius, mm	Substrate material	Catalogue number	
				Ø25.4 × 6 mm	Ø50.8 × 10 mm
1030 \pm 30	Plano-plano	$-\infty$	BK7	012-8000	015-8000 *
1030 \pm 30	Plano-concave	-50	BK7	012-8005	015-8005
1030 \pm 30	Plano-concave	-100	BK7	012-8010	015-8010
1030 \pm 30	Plano-concave	-150	BK7	012-8015	015-8015
1030 \pm 30	Plano-concave	-200	BK7	012-8020	015-8020
1030 \pm 30	Plano-concave	-250	BK7	012-8025	015-8025
1030 \pm 30	Plano-concave	-500	BK7	012-8050	015-8050
1030 \pm 30	Plano-concave	-1000	BK7	012-8100	015-8100
1030 \pm 30	Plano-concave	-2000	BK7	012-8200	015-8200
1030 \pm 30	Plano-concave	-2500	BK7	012-8250	015-8250
1030 \pm 30	Plano-concave	-4000	BK7	012-8400	015-8400
1030 \pm 30	Plano-concave	-5000	BK7	012-8500	015-8500
1030 \pm 30	Plano-plano	$-\infty$	UV FS	022-8000	025-8000 *
1030 \pm 30	Plano-concave	-50	UV FS	022-8005	025-8005
1030 \pm 30	Plano-concave	-100	UV FS	022-8010	025-8010
1030 \pm 30	Plano-concave	-150	UV FS	022-8015	025-8015
1030 \pm 30	Plano-concave	-200	UV FS	022-8020	025-8020
1030 \pm 30	Plano-concave	-250	UV FS	022-8025	025-8025
1030 \pm 30	Plano-concave	-500	UV FS	022-8050	025-8050
1030 \pm 30	Plano-concave	-1000	UV FS	022-8100	025-8100
1030 \pm 30	Plano-concave	-2000	UV FS	022-8200	025-8200
1030 \pm 30	Plano-concave	-2500	UV FS	022-8250	025-8250
1030 \pm 30	Plano-concave	-4000	UV FS	022-8400	025-8400
1030 \pm 30	Plano-concave	-5000	UV FS	022-8500	025-8500
1030 \pm 30	Plano-convex	+100	BK7	012-9010	015-9010
1030 \pm 30	Plano-convex	+200	BK7	012-9020	015-9020
1030 \pm 30	Plano-convex	+500	BK7	012-9050	015-9050
1030 \pm 30	Plano-convex	+1000	BK7	012-9100	015-9100
1030 \pm 30	Plano-convex	+2000	BK7	012-9200	015-9200
1030 \pm 30	Plano-convex	+4000	BK7	012-9400	015-9400
1030 \pm 30	Plano-convex	+100	UV FS	022-9010	025-9010
1030 \pm 30	Plano-convex	+200	UV FS	022-9020	025-9020
1030 \pm 30	Plano-convex	+500	UV FS	022-9050	025-9050
1030 \pm 30	Plano-convex	+1000	UV FS	022-9100	025-9100
1030 \pm 30	Plano-convex	+2000	UV FS	022-9200	025-9200
1030 \pm 30	Plano-convex	+4000	UV FS	022-9400	025-9400

* Thickness of plano-plano rear mirrors of Ø50.8 is 8 mm.



HR>99.8% @ 800±20 nm, AOI=0°

Wave-length, nm	Substrate type	Radius, mm	Substrate material	Catalogue number	
				Ø25.4 × 6 mm	Ø50.8 × 10 mm
800±20	Plano-plano	-∞	BK7	062-8000	065-8000 *
800±20	Plano-concave	-50	BK7	062-8005	065-8005
800±20	Plano-concave	-100	BK7	062-8010	065-8010
800±20	Plano-concave	-150	BK7	062-8015	065-8015
800±20	Plano-concave	-200	BK7	062-8020	065-8020
800±20	Plano-concave	-250	BK7	062-8025	065-8025
800±20	Plano-concave	-500	BK7	062-8050	065-8050
800±20	Plano-concave	-1000	BK7	062-8100	065-8100
800±20	Plano-concave	-2000	BK7	062-8200	065-8200
800±20	Plano-concave	-2500	BK7	062-8250	065-8250
800±20	Plano-concave	-4000	BK7	062-8400	065-8400
800±20	Plano-concave	-5000	BK7	062-8500	065-8500
800±20	Plano-plano	-∞	UV FS	082-8000	085-8000 *
800±20	Plano-concave	-50	UV FS	082-8005	085-8005
800±20	Plano-concave	-100	UV FS	082-8010	085-8010
800±20	Plano-concave	-150	UV FS	082-8015	085-8015
800±20	Plano-concave	-200	UV FS	082-8020	085-8020
800±20	Plano-concave	-250	UV FS	082-8025	085-8025
800±20	Plano-concave	-500	UV FS	082-8050	085-8050
800±20	Plano-concave	-1000	UV FS	082-8100	085-8100
800±20	Plano-concave	-2000	UV FS	082-8200	085-8200
800±20	Plano-concave	-2500	UV FS	082-8250	085-8250
800±20	Plano-concave	-4000	UV FS	082-8400	085-8400
800±20	Plano-concave	-5000	UV FS	082-8500	085-8500
800±20	Plano-convex	+100	BK7	062-9010	065-9010
800±20	Plano-convex	+200	BK7	062-9020	065-9020
800±20	Plano-convex	+500	BK7	062-9050	065-9050
800±20	Plano-convex	+1000	BK7	062-9100	065-9100
800±20	Plano-convex	+2000	BK7	062-9200	065-9200
800±20	Plano-convex	+4000	BK7	062-9400	065-9400
800±20	Plano-convex	+100	UV FS	082-9010	085-9010
800±20	Plano-convex	+200	UV FS	082-9020	085-9020
800±20	Plano-convex	+500	UV FS	082-9050	085-9050
800±20	Plano-convex	+1000	UV FS	082-9100	085-9100
800±20	Plano-convex	+2000	UV FS	082-9200	085-9200
800±20	Plano-convex	+4000	UV FS	082-9400	085-9400

* Thickness of plano-plano rear mirrors of Ø50.8 is 8 mm.

RELATED PRODUCTS

Uncoated Curved Mirrors

See page 1.7

Kinematic Mirror Mount 840-0010

See page 8.54



Kinematic Mirror and Beamsplitter Mount 840-0020

See page 8.54

