

Nd:YAG Laser Optics

LASER MIRRORS

Our Nd:YAG laser mirrors are suitable for fundamental Nd:YAG laser 1064 nm, frequency-doubled 532 nm, frequency-tripled 355 nm and frequency quadrupled 266 nm wavelength application. Two kinds of substrate material are available. Laser line mirrors are designed for 45°

angle of incidence. Featuring high polishing quality, low scattering and high damage threshold, our dielectric reflectors enables perfect beam steering for Nd:YAG lasers.

Substrate

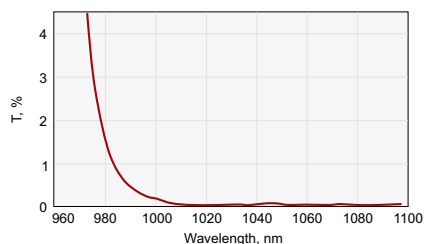
Material	UV grade Fused Silica or BK7 glass
S1 Surface Flatness	$\lambda/10$ at 633 nm
S1 Surface Quality	20–10 scratch & dig (MIL-PRF-13830B)
S2 Surface Quality	Commercial polish
Diameter Tolerance	+0.00 mm -0.12 mm
Thickness Tolerance	± 0.25 mm
Wedge	< 3 min
Chamfer	0.3 mm at 45° typical

Coating

Technology	Electron beam multilayer dielectric or Ion Beam Sputtering
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Damage Threshold:	
BK7 laser line mirrors	5 J/cm ² , 8 nsec pulse, 1064 nm typical
UV FS laser line mirrors	8 J/cm ² , 8 nsec pulse, 1064 nm typical
BK7 dual line mirrors	1 J/cm ² , 8 nsec pulse, 1064 nm typical
UV FS dual line mirrors	2 J/cm ² , 8 nsec pulse, 1064 nm typical
Coated Surface Flatness	$\lambda/10$ at 633 nm over clear aperture
Angle of Incidence	0 or 45°

LASER LINE MIRRORS

Substrate material: **BK7 grade A**

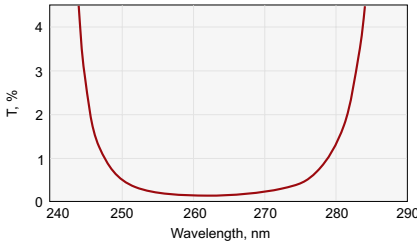


HR 1064 nm, AOI = 45°

Wavelength, nm	AOI=0°		AOI=45°	
	R, % (s+p)/2	Catalogue number	R, % (s+p)/2	Catalogue number
Size – Ø12.7 × 3 mm				
351–361	99.7	031-0350-i0	99.5	031-0350
527–532	99.7	031-0530-i0	99.5	031-0530
1047–1064	99.7	031-1060-i0	99.5	031-1060
Size – Ø12.7 × 6 mm				
351–361	99.7	031-0350T6-i0	99.5	031-0350T6
527–532	99.7	031-0530T6-i0	99.5	031-0530T6
1047–1064	99.7	031-1060T6-i0	99.5	031-1060T6
Size – Ø25.4 × 6 mm				
351–361	99.7	032-0350-i0	99.5	032-0350
527–532	99.7	032-0530-i0	99.5	032-0530
1047–1064	99.7	032-1060-i0	99.5	032-1060
Size – Ø50.8 × 8 mm				
351–361	99.7	035-0350-i0	99.5	035-0350
527–532	99.7	035-0530-i0	99.5	035-0530
1047–1064	99.7	035-1060-i0	99.5	035-1060
Size – Ø76.2 × 12.7 mm				
527–532	99.7	037-0530-i0	99.5	037-0530
1047–1064	99.7	037-1060-i0	99.5	037-1060

LASER LINE MIRRORS

Substrate material: **UV grade Fused Silica**



HR 266 nm, AOI = 45°

Wavelength, nm	AOI=0°		AOI=45°	
	R, % (s+p)/2	Catalogue number	R, % (s+p)/2	Catalogue number

Size – Ø12.7 × 3 mm

262–266	99	041-0260-i0	99	041-0260
351–361	99.7	041-0350-i0	99.5	041-0350
527–532	99.7	041-0530-i0	99.5	041-0530
1047–1064	99.7	041-1060-i0	99.5	041-1060

Size – Ø12.7 × 6 mm

262–266	99	041-0260T6-i0	99	041-0260T6
351–361	99.7	041-0350T6-i0	99.5	041-0350T6
527–532	99.7	041-0530T6-i0	99.5	041-0530T6
1047–1064	99.7	041-1060T6-i0	99.5	041-1060T6

Size – Ø25.4 × 6 mm

262–266	99	042-0260-i0	99	042-0260
351–361	99.7	042-0350-i0	99.5	042-0350
527–532	99.7	042-0530-i0	99.5	042-0530
1047–1064	99.7	042-1060-i0	99.5	042-1060

Size – Ø50.8 × 8 mm

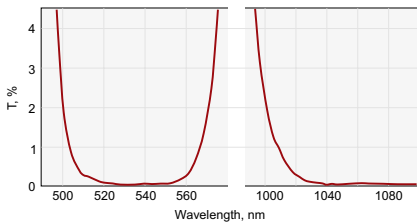
262–266	99	045-0260-i0	99	045-0260
351–361	99.7	045-0350-i0	99.5	045-0350
527–532	99.7	045-0530-i0	99.5	045-0530
1047–1064	99.7	045-1060-i0	99.5	045-1060

Size – Ø76.2 × 12.7 mm

351–361	99.7	047-0350-i0	99.5	047-0350
527–532	99.7	047-0530-i0	99.5	047-0530
1047–1064	99.7	047-1060-i0	99.5	047-1060

DUAL BAND MIRRORS

Substrate material: **BK7 grade A**



HR 532+1064 nm, AOI = 45°

Wavelength, nm	AOI=0°		AOI=45°	
	R, % (s+p)/2	Catalogue number	R, % (s+p)/2	Catalogue number

Size – Ø12.7 × 3 mm

532+1064	99.7	051-5306-i0	99.5	051-5306
633+1064	99.7	051-6306-i0	99.5	051-6306

Size – Ø12.7 × 6 mm

532+1064	99.7	051-5306T6-i0	99.5	051-5306T6
633+1064	99.7	051-6306T6-i0	99.5	051-6306T6

Size – Ø25.4 × 6 mm

532+1064	99.7	052-5306-i0	99.5	052-5306
633+1064	99.7	052-6306-i0	99.5	052-6306

Size – Ø50.8 × 8 mm

532+1064	99.7	055-5306-i0	99.5	055-5306
633+1064	99.7	055-6306-i0	99.5	055-6306

Size – Ø76.2 × 12.7 mm

532+1064	99.7	057-5306-i0	99.5	057-5306
633+1064	99.7	057-6306-i0	99.5	057-6306

Related Products

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Nd:YAGレーザー、Ti:Sレーザー
OPOLレーザー

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