

DICHROIC MIRRORS

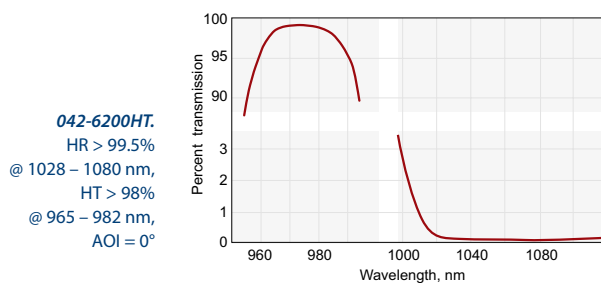
Features

- Laser Damage Threshold:
 - > 2 J/cm², 8 ns pulse, 1064 nm typical for BK7 substrates
 - > 5 J/cm², 8 ns pulse, 1064 nm typical for UV FS substrates
- Back side antireflection coated: R < 0.5%
- Parallelism: 30 arcsec

Substrate

Material	UV grade fused silica or BK7 glass
S1 Surface Flatness	λ/10 typical at 633 nm
S1 Surface Quality	20 – 10 scratch & dig (MIL-PRF-13830B)
S2 Surface Flatness	λ/10 typical at 633 nm
S2 Surface Quality	20 – 10 scratch & dig (MIL-PRF-13830B)
Diameter Tolerance	+0.00 mm / -0.12 mm
Thickness Tolerance	±0.25 mm
Parallelism	30 arcsec
Chamfer	0.3 mm at 45° typical

DICHROIC MIRRORS WITH HIGH TRANSMISSION



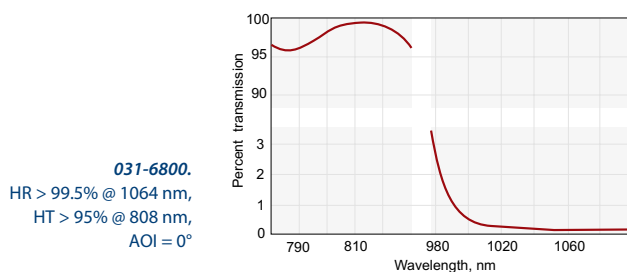
Coating

Technology	Ion Beam Sputtering (IBS)
Back side antireflection coated	R < 0.1% at AOI = 0° R < 0.5% at AOI = 45°

Reflected wavelength, nm, R > 99.5%	Transmitted wavelength, nm	Transmission, %	AOI	Laser Damage Threshold ¹⁾ , J/cm ²	Substrate material	Ø12.7x3 mm		Ø25.4x6 mm	
						Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	808	>99	0	>10	UV FS	041-6800HT	193	042-6800HT	242
1064	808	>99	45	>10	UV FS	041-6805HT	209	042-6805HT	259
1028 – 1080	965 – 982	>98	0	>10	UV FS	041-6200HT	242	042-6200HT	286
1028 – 1080	965 – 982	>98	45	>3	UV FS	041-6205HT	275	042-6205HT	319
1028 – 1080	965 – 982	>98	22.5	>3	UV FS	041-6202HT	242	042-6202HT	286

¹⁾ Measured with 10 ns, 10 Hz pulse, 1064 nm typical.

STANDARD DICHROIC MIRRORS



Coating

Technology	Electron beam multilayer dielectric
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Laser Damage Threshold:	
BK7	2 J/cm ² , 8 ns pulse, 1064 nm typical
UV FS	5 J/cm ² , 8 ns pulse, 1064 nm typical
Coated Surface Flatness	λ/10 at 633 nm over 85% of diameter available

Reflected wavelength, nm, R > 99.5%	Transmitted wavelength, nm	Transmission, %	AOI	Substrate material	Ø12.7x3 mm		Ø25.4x6 mm	
					Catalogue number	Price, EUR	Catalogue number	Price, EUR
633	1064	>95	45	BK7	041-6105	99	042-6105	127
1064	633	>90	45	BK7	041-6605	105	042-6605	132
1064	808	>95	0	BK7	031-6800	105	032-6800	132
1064	808	>95	45	BK7	031-6805	105	032-6805	132
1064	808	>95	0	UV FS	041-6800	132	042-6800	165
1064	808	>95	45	UV FS	041-6805	132	042-6805	165