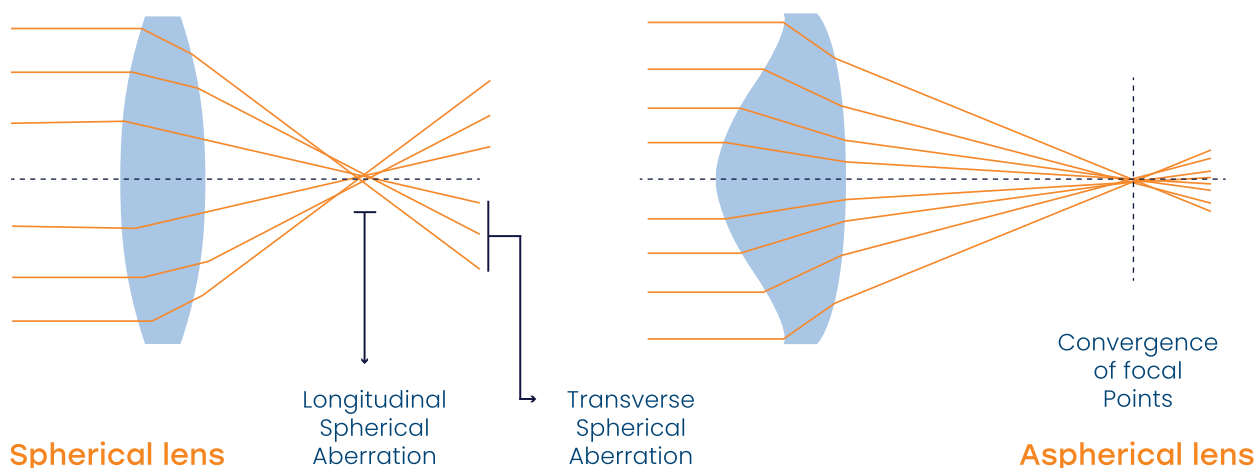


ASPHERIC SUPRASIL LENSES

CNC polished precision aspherical lenses are designed for diffraction-limited performance. We offer convex - aspherical lenses made of Suprasil specially designed to have the best performance and the highest laser induced damage threshold. The standard lenses can be supplied uncoated or anti-reflective coated at 1000-1080 nm. Other coating regions are available according to the request.

- Spherical and Coma aberrations corrected
- Back reflected light is divergent
- Substrate material absorption: <3 ppm/cm at 1064nm
- Total metallic impurities: <1 ppm
- AR Coating absorption at 1070 nm: ~ 0.5 ppm



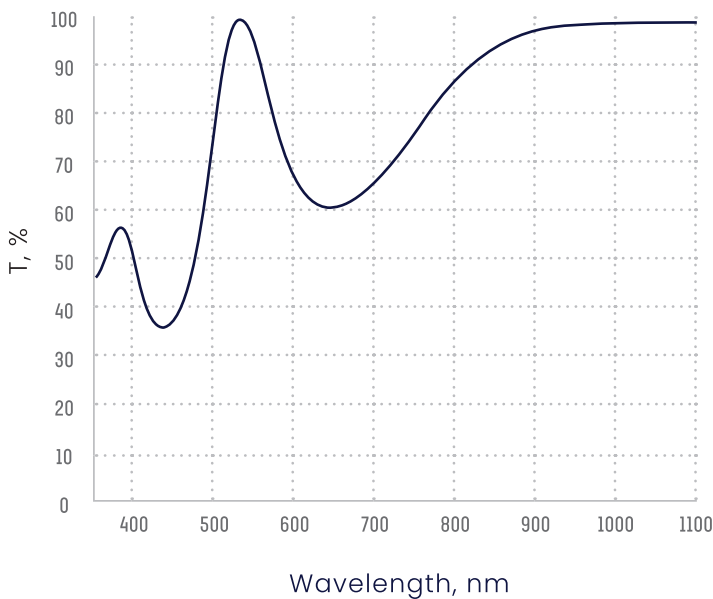
Specifications	
Refractive index	Suprasil – Nd=1.45846
Design wavelength	1030 nm (refractive index N=1.4496)
Surface quality	40-20 scratch & dig (uncoated)
Clear aperture	$>85\%$ of diameter
Diameter tolerance	$+0.0, -0.05$ mm
Bevel	0.3 mm max @ 45°
Center thickness tolerance	≤ 0.05 mm
EFL tolerance	$\leq 0.1\%$
Asphere figure error P-V	± 1 μ m
Surface form deviation RMS	≤ 0.3 μ m
Slope error	<0.3 mrad/mm
Centration	<3 arc min

Coating	
Technology	Ion Beam Sputtering
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Reflectivity at 1000-1080nm	$<0.1\%$ at AOI= $0-15^\circ$ and $<0.3\%$ at AOI= $15-33^\circ$
Damage Threshold	>560 mJ/cm ² , 200 fsec pulse, 200 Hz, 1030 nm >16 MW/cm ² CW at 1070nm, linear power density 172 kW/cm
Absorption in coating	<1 ppm at 1070nm
Angle of incidence	$0-33^\circ$

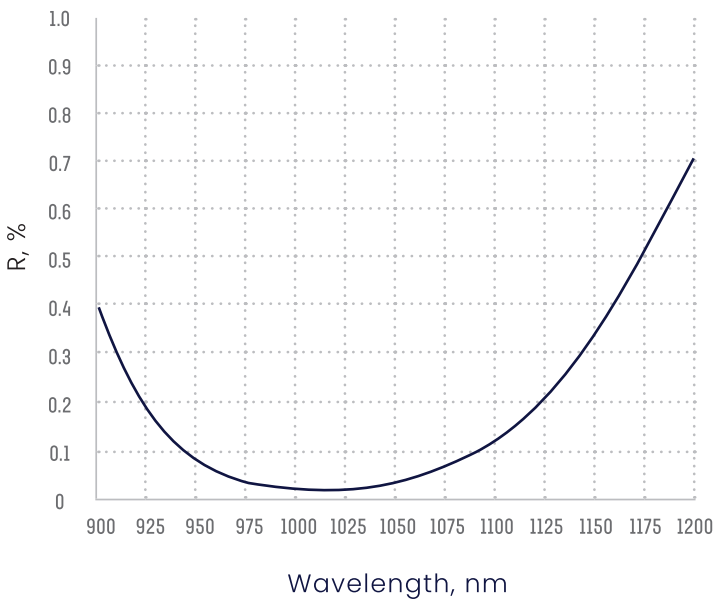
Convex - Aspheric Lenses Coated AR/AR @1000-1080nm

Code	Substrate	Diameter	CT	EFL	Price
118-2535+AR1070	Suprasil	25.4 mm	7.33 mm	35 mm	450 €
118-2550+AR1070	Suprasil	25.4 mm	5.66 mm	50 mm	450 €
118-2575+AR1070	Suprasil	25.4 mm	4.41 mm	75 mm	450 €
118-2599+AR1070	Suprasil	25.4 mm	3.80 mm	100 mm	450 €
118-5075+AR1070	Suprasil	50.8 mm	12.89 mm	75 mm	850 €
118-5100+AR1070	Suprasil	50.8 mm	10.31 mm	100 mm	850 €
118-5150+AR1070	Suprasil	50.8 mm	7.83 mm	150 mm	850 €
118-5200+AR1070	Suprasil	50.8 mm	6.61 mm	200 mm	850 €

AR/AR@1000-1080 nm, AOI=0°



AR/AR@1000-1080 nm, AOI=25°



Convex - Aspheric Lenses Uncoated

Code	Substrate	Diameter	CT	EFL	Price
118-2535	Suprasil	25.4 mm	7.33 mm	35 mm	390 €
118-2550	Suprasil	25.4 mm	5.66 mm	50 mm	390 €
118-2575	Suprasil	25.4 mm	4.41 mm	75 mm	390 €
118-2599	Suprasil	25.4 mm	3.80 mm	100 mm	390 €
118-5075	Suprasil	50.8 mm	12.89 mm	75 mm	750 €
118-5100	Suprasil	50.8 mm	10.31 mm	100 mm	750 €
118-5150	Suprasil	50.8 mm	7.83 mm	150 mm	750 €
118-5200	Suprasil	50.8 mm	6.61 mm	200 mm	750 €