

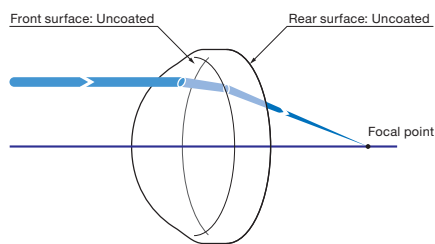
These precision polished aspheric lenses can condense the collimated light into the range of diffraction limited.

These lenses are ideally suited for collimating the LD emitted light or focusing the collimated light into the optical fiber.

- High numerical apertures for effective light condensing.
- Surface irregularity of convex surface is less than  $0.1\mu\text{m}$  for AGL-EA/AGL-GA series and less than  $0.5\mu\text{m}$  for AGL-EB/AGL-GB series.

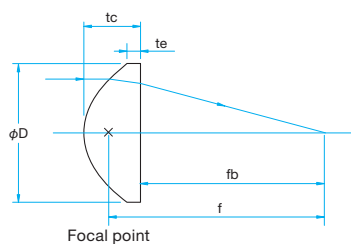


### Schematic



### Outline Drawing

(in mm)



- Tolerance
- Diameter  $\phi D_{\pm 0.1}$
- Thickness  $t_c \pm 0.1$
- Focal length  $\pm 1\%$

### Specifications

Material	S-LAH64
Refractive Index	1.792 (546.1nm), 1.777 (780nm)
Abbe number $\nu_d$	47.37
Rear surface form	Plano
Centration	< 3'
Coating	Uncoated
Clear aperture	90% of diameter
Surface Quality (Scratch-Dig)	60-40

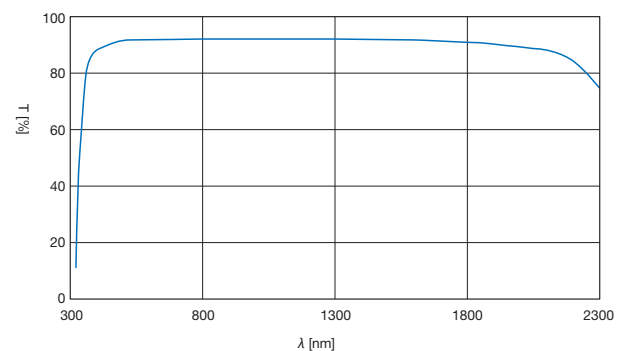
### Guide

- ▶ High precision polished aspheric lens with anti-reflection coating on are available upon request.
- ▶ To mount the high precision polished aspheric lenses, fixed lens holders (LHF-S, LHA) are available.
- ▶ Contact our Sales Division with your request for custom focal length, diameter and NA not listed on our website or in the catalog.

### Attention

- ▶ There is a direction to put a light in the High precision polished aspheric lens. Please make sure to put the incident parallel light from the convex side.
- ▶ If it reversed, the spherical aberration is deteriorated and the focused spot becomes large.
- ▶ If the light other than the design wavelength is focused, the focal spot may not reach a diffraction limit due to a residual aberration.
- ▶ Since a high precision polished aspheric lens is not chromatically corrected, the focal length (back focal length) will change depending on the wavelength.
- ▶ Since there is no anti-reflection coating on the lens, by the reflection loss of the front surface and the back surface, the transmittance is 90% or less.

### Typical Transmittance Data T: Transmission



Application Systems

Optics &amp; Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators &amp; Adjusters

Motorized Stages

Light Sources &amp; Laser Safety

Index

Guide

Mirrors

Beamsplitters

Polarizers

Lenses

Multi-Element Optics

Filters

Prisms

Substrates/Windows

Optical Data

Maintenance

Selection Guide

Plano Convex Lenses

Plano Concave Lenses

Biconvex Lenses

Biconcave Lenses

Kit

Reasonable Lens

Cylindrical

Others



Specifications								
Part Number	Designwav-length [nm]	Diameter $\phi$ D [mm]	Focal length f [mm]	Back focal length fb [mm]	NA	Edge thickness te [mm]	Center thickness tc [mm]	Surface irregularity of convex surface [ $\mu$ m]
AGL-10-EA-08P	546.1	$\phi$ 10	8	5.91	0.54	1.82	3.9	< 0.1
AGL-10-EA-10P	546.1	$\phi$ 10	10	7.77	0.44	2.37	4.0	< 0.1
AGL-15-EA-12P	546.1	$\phi$ 15	12	8.93	0.54	2.38	5.5	< 0.1
AGL-20-EA-15P	546.1	$\phi$ 20	15	11.10	0.55	2.54	7.0	< 0.1
AGL-20-EA-18P	546.1	$\phi$ 20	18	13.93	0.51	3.65	7.3	< 0.1
AGL-25-EA-20P	546.1	$\phi$ 25	20	15.64	0.57	2.68	7.85	< 0.1
AGL-25-EA-24P	546.1	$\phi$ 25	24	19.63	0.49	3.60	7.85	< 0.1
AGL-30-EA-24P	546.1	$\phi$ 30	24	18.99	0.56	2.80	9.0	< 0.1
AGL-40-EA-30P	546.1	$\phi$ 40	30	22.47	0.60	4.59	13.5	< 0.1
AGL-50-EA-38P	546.1	$\phi$ 50	38	28.51	0.60	6.03	17.0	< 0.1
AGL-10-EB-08P	546.1	$\phi$ 10	8	5.91	0.54	1.82	3.9	< 0.5
AGL-10-EB-10P	546.1	$\phi$ 10	10	7.77	0.44	2.37	4.0	< 0.5
AGL-15-EB-12P	546.1	$\phi$ 15	12	8.93	0.54	2.38	5.5	< 0.5
AGL-20-EB-15P	546.1	$\phi$ 20	15	11.10	0.55	2.54	7.0	< 0.5
AGL-20-EB-18P	546.1	$\phi$ 20	18	13.93	0.51	3.65	7.3	< 0.5
AGL-25-EB-20P	546.1	$\phi$ 25	20	15.64	0.57	2.68	7.85	< 0.5
AGL-25-EB-24P	546.1	$\phi$ 25	24	19.63	0.49	3.60	7.85	< 0.5
AGL-30-EB-24P	546.1	$\phi$ 30	24	18.99	0.56	2.80	9.0	< 0.5
AGL-40-EB-30P	546.1	$\phi$ 40	30	22.47	0.60	4.59	13.5	< 0.5
AGL-50-EB-38P	546.1	$\phi$ 50	38	28.51	0.60	6.03	17.0	< 0.5
AGL-10-GA-08P	780	$\phi$ 10	8	5.89	0.54	1.76	3.9	< 0.1
AGL-10-GA-10P	780	$\phi$ 10	10	7.75	0.44	2.33	4.0	< 0.1
AGL-15-GA-12P	780	$\phi$ 15	12	8.91	0.54	2.31	5.5	< 0.1
AGL-20-GA-15P	780	$\phi$ 20	15	11.07	0.61	2.43	7.0	< 0.1
AGL-20-GA-18P	780	$\phi$ 20	18	13.89	0.51	3.57	7.3	< 0.1
AGL-25-GA-20P	780	$\phi$ 25	20	15.59	0.58	2.54	7.85	< 0.1
AGL-25-GA-24P	780	$\phi$ 25	24	19.58	0.49	3.51	7.85	< 0.1
AGL-30-GA-24P	780	$\phi$ 30	24	18.94	0.56	2.65	9.0	< 0.1
AGL-40-GA-30P	780	$\phi$ 40	30	22.40	0.61	4.38	13.5	< 0.1
AGL-50-GA-38P	780	$\phi$ 50	38	28.43	0.61	5.76	17.0	< 0.1
AGL-10-GB-08P	780	$\phi$ 10	8	5.89	0.54	1.76	3.9	< 0.5
AGL-10-GB-10P	780	$\phi$ 10	10	7.75	0.44	2.30	4.0	< 0.5
AGL-15-GB-12P	780	$\phi$ 15	12	8.91	0.54	2.31	5.5	< 0.5
AGL-20-GB-15P	780	$\phi$ 20	15	11.07	0.61	2.43	7.0	< 0.5
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AGL-40-GB-30P	780	$\phi$ 40	30	22.40	0.61	4.38	13.5	< 0.5
AGL-50-GB-38P	780	$\phi$ 50	38	28.43	0.61	5.76	17.0	< 0.5

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motoeized Stages

Light Sources & Laser Safety

Index

Guide

Mirrors

Beamsplitters

Polarizers

Lenses

Multi-Element Optics

Filters

Prisms

Substrates/Windows

Optical Data

Maintenance

Selection Guide

Plano Convex Lenses

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