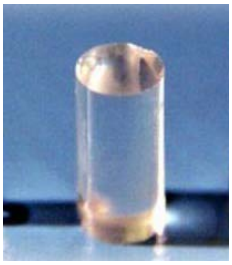
Gradient Index Lens

(patent pending)

Product Description

GL series Gradient Index Micro Lens is an oxide glass lens made of patented optical material. It features excellent optical and mechanical performance for applications such as fiber collimators and imaging arrays, meeting the most stringent industry qualifications. It is volume produced in a state-of-the-art facility using proprietary processes. AGILTRON also offers dimension and surface coating options to meet specific customer requirements.



Features

- Low Loss
- Low Distortion
- Low Cost
- Patented Technology
- Direct Replacement for SELFOC and C-lens

Specifications

Pair Insertion Loss *	< 0.15 dB at 1550nm	
Polarization Preservation	> 25 dB	
Standard pitch	0.23 P, 0.25 P, 0.5 P	
Numerical Aperture (NA)	0.46 typical	
Standard diameter (d)	1.8 mm, 1.0 mm	
√A (at 1550 nm)	d=1.8mm	0.322±2.5%
	d=1.0mm	0.589±2.5%
Effective lens diameter	>70% typical	
Lens Length tolerance	±2.5%	
Lens Diameter tolerance	+0.005/-0.010 mm	
End Facet Perpendicularity	6 mrad	
Ellipticity	3 μm	
Angle facet tolerance	±0.5 degree	
Glass Material	Proprietary GL material	
Optical Coating	Single band AR or Dual Band AR optional	
Young's Modulus	6,000-8,000 Kgf/mm^2	
Thermal Expansion Coefficient	10x10^{-6}/°C	
Maximum Temperature	350 °C	

* SMF-28 fiber collimator pair

Applications

- Fiber Collimator
- Imaging
- Optical System
- Optical coupling

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Revision: 050-10
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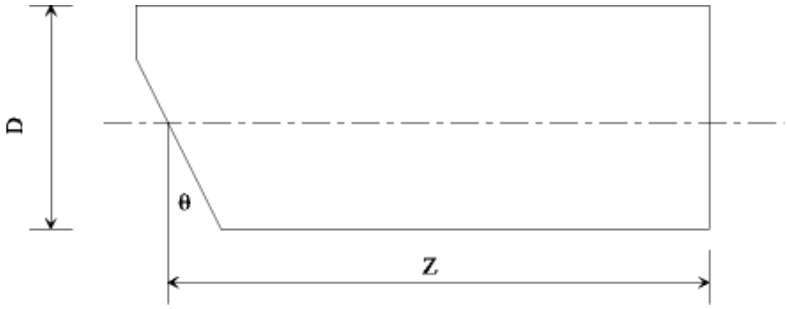
End-Face Geometry



Ordering Information

GLNS	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Diameter	Pitch	λ*	NA	Coating		Surface type		Angle
	1.8mm=1 1.0mm=2	0.23P =1 0.25p = 2 0.50p = 3	1550 =1 1310 = 2 Special=3	0.46=1 0.60=2	1310=1 1550 =2 1310+1550=3 Special=0	Non=0 Front=1 Back= 2 Front/Back=3	Flat/Flat =11		0 degrees=0 8 degrees=8 Special=9

* Wavelength for which pitch is optimized

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