

## Datasheet Plastic Collimator Lens CAY046

VIAOPTIC Part No 099-099-001-010

These data concern a full plastic bi-aspherical lens. It is specified for use as a collimator in combination with a diode laser. It can be mounted by use of glue or spring-loaded. Mechanical lock-mounting is not advisable because of possible distortions.

Parameters	Wavelength		Unit
	670 nm	785 nm	
<b>Design conditions</b>			
N.A.	0.40		--
Clear Aperture CA	3.7		mm
Designed with laser cover glass (BK7) on source side:			
Distance from source	0.55		mm
Glass thickness	0.25		mm
<b>Optical parameters</b>			
Focal Length	4.60	4.62	mm
Back Focal Length BFL	3.09	3.12	mm
Back Focal Length BFL (with BK7 coverglass)	3.18	3.20	mm
Free Working Distance FWD	2.99	3.02	mm
Free Working Distance FWD (with BK7 coverglass)	3.08	3.10	mm
RMS mean	on axis	30	mλ
RMS max. (±3σ)	on axis	40	mλ
Optical Tolerance	0.1		mm
Field Radius	0.1		mm
<b>Mechanical parameters</b>			
Mounting hole diameter D <sub>mh</sub>	Ø 7.40		mm
Other parameters: see drawing			
<b>Environmental stability</b>			
Storage Temperature	-25 to 70		°C
Operating Temperature	5 to 65		°C

General Data:  
 Transmission [%]: 90  
 Lens Material: Acrylic

Specifications subject to change without notice.  
 Zemax catalogue file available.