

**Datasheet Plastic Collimator Lens CAY046/055**  
**VIAOPTIC Part No 099-099-001-007**

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.	0.37		--
Clear Aperture CA	3.4		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	4.64	mm
Back Focal Length <i>BFL (with BK7 coverglass)</i>	3.18	3.20	mm
Free Working Distance <i>FWD</i>	2.98	3.00	mm
<i>RMS</i> mean		30	mλ
<i>RMS</i> max. ( $\pm 3\sigma$ )		40	mλ
Optical Tolerance	0.1		mm
Field Radius	0.1		mm
<b>Mechanical parameters</b>			
Mounting hole diameter $D_{mh}$	Ø 5.50		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
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Specifications subject to change without notice.  
 Zemax catalogue file available.