

Datasheet Plastic Collimator Lens CAY033/040

VIAOPTIC Part No 099-099-001-004

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 670 nm	Unit
Design conditions		
N.A.	0.38	--
Clear Aperture CA	2.5	mm
Designed with laser cover glass (BK7) on source side:		
Distance from source	0.55	mm
Glass thickness	0.25	mm
Optical parameters		
Focal Length	3.30	mm
Back Focal Length <i>BFL</i>	1.99	mm
Back Focal Length <i>BFL (with laserglass)</i>	2.08	mm
Free Working Distance <i>FWD</i>	1.84	mm
Free Working Distance <i>FWD (with laserglass)</i>	1.93	mm
<i>RMS</i> mean	on axis	30
	total	
<i>RMS</i> max. ($\pm 3\sigma$)	on axis	40
	total	65
Optical Tolerance	0.1	mm
Field Radius	0.05	mm
Mechanical parameters		
Mounting hole diameter D_{mh}	Ø 4.0	mm
Other parameters: see drawing		
Environmental stability		
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.