

Datasheet Plastic Collimator Lens CAX100

VIAOPTIC Part No 099-099-001-003

These data concern a full plastic aspherical plano-convex 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.	0.20	--
Clear Aperture CA	4.1	mm
Designed with laser cover glass (BK7) on source side:		
Distance from source	0.55	mm
Glass thickness (BK-7)	0.25	mm
Optical parameters		
Focal Length	10.0	mm
Back Focal Length <i>BFL</i>	9.21	mm
Back Focal Length <i>BFL</i> (incl BK7-glass)	9.30	mm
Free Working Distance <i>FWD</i>	8.48	mm
Free Working Distance <i>FWD</i> (incl BK7-glass)	8.57	mm
<i>RMS</i> mean on axis	35	mλ
<i>RMS</i> max. ($\pm 3\sigma$) on axis	80	mλ
Optical Tolerance	0.1	mm
Field Radius	0.2	mm
Mechanical parameters		
Mounting hole diameter D_{mh}	Ø 6.28	mm
Other parameters: see drawing		
Environmental stability		
Storage Temperature	-25 to 100	°C
Operating Temperature	-10 to 75	°C

General Data:

Transmission [%]: 90

Lens Material: Polycarbonate

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