

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		
<i>N.A.</i>	0.38	--
Clear Aperture <i>CA</i>	2.5	mm
Designed with laser cover glass (<i>BK7</i>) on source side:		
Distance from source	0.55	mm
Glass thickness	0.25	mm
Optical parameters		
Focal Length	3.35	mm
Back Focal Length <i>BFL</i>	2.07	mm
Free Working Distance <i>FWD</i>	1.97	mm
<i>RMS</i> mean		
on axis	30	$m\lambda$
total		
<i>RMS</i> max. ($\pm 3\sigma$)		
on axis	40	$m\lambda$
total	65	$m\lambda$
Optical Tolerance	0.1	mm
Field Radius	0.05	mm
Mechanical parameters		
Mounting hole diameter D_{mh}	$\varnothing 4.0$	mm
Other parameters: see drawing		
Environmental stability		
Storage Temperature	-25 to 70	°C
Operating Temperature	5 to 65	°C

General Data: Transmission: 90 % for 670 nm Lens Material: Acrylic
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Specifications subject to change without notice.
 Zemax catalogue file available.