

Datasheet Plastic Collimator Lens CAY033

VIAOPTIC Part No 099-099-001-001

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	785nm	
Design conditions			
<i>N.A.</i>	0.4		--
Clear Aperture <i>CA</i>	2.7		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	3.30	3.32	mm
Back Focal Length <i>BFL</i>	2.08	2.10	mm
Free Working Distance <i>FWD</i>	1.98	2.00	mm
<i>RMS</i> mean		30	mλ
	on axis		
	total		
<i>RMS</i> max. ($\pm 3\sigma$)		40	mλ
	on axis		
	total	65	mλ
Optical Tolerance	0.1		mm
Field Radius	0.05		mm
Mechanical parameters			
Mounting hole diameter D_{mh}	7.40		mm
Other parameters: see drawing			
Environmental stability			
Storage Temperature	-25 to 70		°C
Operating Temperature	5 to 65		°C

<p>General Data: Transmission: 95 % for 785 nm Lens Material: Acrylic</p>

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