

## 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	
<b>Design conditions</b>			
<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
<b>Optical parameters</b>			
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	$m\lambda$
	on axis		
	total		
<i>RMS</i> max. ( $\pm 3\sigma$ )		40	$m\lambda$
	on axis		
	total	65	$m\lambda$
Optical Tolerance	0.1		mm
Field Radius	0.05		mm
<b>Mechanical parameters</b>			
Mounting hole diameter $D_{mh}$	7.40		mm
Other parameters: see drawing			
<b>Environmental stability</b>			
Storage Temperature	-25 to 70		°C
Operating Temperature	5 to 65		°C

**General Data:**

Transmission: 95 % for 785 nm

Lens Material: Acrylic

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