



## Datasheet Plastic Collimator Lens CAY046

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	785 nm	
<b>Design conditions</b>			
N.A.	0.40		--
Clear Aperture CA	3.7		mm
Designed with laser cover glass (BK7) on source side:			
Distance from source	0.55		mm
Glass thickness	0.25		mm
<b>Optical parameters</b>			
Focal Length	4.60	4.64	mm
Back Focal Length BFL (with BK7 coverglass)	3.18	3.20	mm
Free Working Distance FWD	3.08	3.10	mm
RMS mean	on axis	30	mλ
RMS max. ( $\pm 3\sigma$ )	on axis	40	mλ
Optical Tolerance	0.1		mm
Field Radius	0.1		mm
<b>Mechanical parameters</b>			
Mounting hole diameter $D_{mh}$	Ø 7.40 (+ 0.03)		mm
Other parameters: see drawing			
<b>Environmental stability</b>			
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 cataloguefile available.