

Datasheet Plastic Collimator Lens CAY033/040 N670

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	mλ
	total		
<i>RMS</i> max. ($\pm 3\sigma$)	on axis	40	mλ
	total	65	mλ
Optical Tolerance	0.1		mm
Field Radius	0.05		mm
Mechanical parameters			
Mounting hole diameter D_{mh}	∅ 4.0 (+ 0.03)		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

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