

Datasheet Plastic Collimator Lens CAY046-034N670¹

These data concern a full plastic a-spherical lens. It is 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					Unit
Design conditions (670 nm)					
N.A.	0.37				--
Clear Aperture (<i>Exit Pupil</i>)	3.4				mm
Clear Aperture (<i>Entrance Pupil</i>)	2.6				mm
Optical parameters					
	Wavelength				nm
	546	632	670	780	
Effective Focal Length ¹⁾	4.55	9.87	4.60	4.62	mm
Back Focal Length ¹⁾	3.04	8.46	3.09	3.12	mm
Free Working Distance ¹⁾	2.84	2.85	2.89	2.92	mm
RMS mean ¹⁾	36	31	30	25	mλ
	on axis				
RMS max. ($\pm 3\sigma$) ¹⁾	49	42	40	34	mλ
	on axis				
Field Radius	0.10				mm
1) Remark: without 4 mm SF11 glass or 1.25 mm BK7 glass					
1) Optical Tolerance	+/- 0.10				mm
Mechanical parameters					
Mounting hole diameter D_{mh}	\varnothing 5.50 (+ 0.03)				mm
Lens Thickness	2.70				mm
Optical Eccentricity	< 30				μm
Environmental stability					
Storage Temperature	-25 to 70				°C
Operating Temperature	5 to 65				°C
General Data:					
Transmission [%]:	> 90	(non coated)			
Lens Material:	PMMA				

¹ **Specifications subject to change without notice.**

