

Datasheet Plastic Collimator Lens CAX183

VIAOPTIC Part No 099-099-001-002

These data concern a full plastic aspherical plano-convex 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	785 nm	
Design conditions			
N.A.		0.12	--
Clear Aperture CA		4.3	mm
Designed with laser cover glass (BK7) on source side:			
Distance from source		0.55	mm
Glass thickness		0.25	mm
Optical parameters			
Focal Length	18.15	18.33	mm
Back Focal Length BFL	17.52	17.69	mm
Back Focal Length BFL (with 0.25mm laserglass)	17.60	17.78	mm
Free Working Distance FWD	16.29	16.46	mm
Free Working Distance FWD (with laserglass)	16.37	16.55	mm
RMS mean	on axis	25	mλ
	total		mλ
RMS max. (±3σ)	on axis	30	mλ
	total	35	mλ
Optical Tolerance		0.1	mm
Field Radius		0.3	mm
Mechanical parameters			
Mounting hole diameter D _{mh}		Ø 6.28	mm
Other parameters: see drawing			
Environmental stability			
Storage Temperature		-25 to 100	°C
Operating Temperature		-10 to 75	°C

General Data:

Transmission [%]: 90

Lens Material: Polycarbonate

Specifications subject to change without notice.

Zemax catalogue file available.