

Datasheet Plastic Collimator Lens CAS183

VIAOPTIC Part No 099-099-001-013

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 nm	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	18.70	18.86	mm
Back Focal Length BFL	18.06	18.22	
Back Focal Length BFL (with 0.25mm laserglass)	18.14	18.31	mm
Free Working Distance FWD	16.83	16.99	
Free Working Distance FWD (with 0.25mm laserglass)	16.91	17.08	mm
RMS mean		25	on axis
			total
RMS max. (±3σ)		30	on axis
			total
		35	
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 70		°C
Operating Temperature	0 to 60		°C

General Data:
Transmission [%]: 90
Lens Material: SAN

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