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** 670	785 nm	**Unit**
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}			∅ 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.

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