

Datasheet Plastic Collimator Lens CAX100

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 nm	Unit
Design conditions		
<i>N.A.</i>	0.20	--
Clear Aperture <i>CA</i>	4.1	mm
Designed with laser cover glass (<i>BK7</i>) on source side:		
Distance from source	0.55	mm
Glass thickness (<i>Bk-7</i>)	0.25	mm
Optical parameters		
Focal Length	10.0	mm
Back Focal Length <i>BFL</i>	9.30	mm
Back Focal Length <i>BFL</i> (<i>incl BK7-glass</i>)	9.21	mm
Free Working Distance <i>FWD</i>	8.48	mm
Free Working Distance <i>FWD</i> (<i>incl BK7-glass</i>)	8.57	mm
<i>RMS</i> mean	on axis	35
<i>RMS</i> max. ($\pm 3\sigma$)	on axis	80
Optical Tolerance	0.1	mm
Field Radius	0.2	mm
Mechanical parameters		
Mounting hole diameter D_{mh}	$\varnothing 6.28$	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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SECTION A-A

