

## Datasheet Plastic Collimator Lens CSX122

### VIAOPTIC Part No 099-099-001-005

These data concern a full plastic spherical 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	
<b>Design conditions</b>			
<i>N.A.</i>	0.12		--
Clear Aperture <i>CA</i>	3.0		mm
Designed with laser cover glass ( <i>BK7</i> ) on source side:			
Distance from source	0.55		mm
Glass thickness	0.25		mm
<b>Optical parameters</b>			
Focal Length	12.20	12.32	mm
Back Focal Length <i>BFL</i> ( <i>with 0.25 mm laserglass</i> )	11.58	11.70	mm
Free Working Distance <i>FWD</i>	10.47	10.59	mm
<i>RMS</i> mean	on axis	90	mλ
<i>RMS</i> max. ( $\pm 3\sigma$ )	on axis	95	mλ
	total	95	mλ
Optical Tolerance	0.1		mm
Field Radius	0.3		mm
<b>Mechanical parameters</b>			
Mounting hole diameter $D_{mh}$	Ø 6.28		mm
Other parameters: see drawing			
<b>Environmental stability</b>			
Storage Temperature	-25 to 100		°C
Operating Temperature	-10 to 75		°C

General Data: Transmission [%]: 90 Lens Material: Polycarbonate
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Specifications subject to change without notice.  
Zemax catalogue file available.