

Datasheet Plastic Diffractive Lens CDW042/52

VIAOPTIC Part No 099-099-001-108

These data concern a full plastic a-spherical diffractive 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		
N.A.	0.25	--
Clear Aperture CA	2.1	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	4.24	mm
Back Focal Length <i>BFL</i>	3.57	mm
Free Working Distance <i>FWD</i>	3.08	mm
RMS mean on axis	40	mλ
RMS max. ($\pm 3\sigma$) on axis	50	mλ
Optical Tolerance	0.1	mm
Field Radius	0.1	mm
Mechanical parameters		
Mounting hole diameter D_{mh}	Ø 5.20	mm
Other parameters: see drawing		
Environmental stability		
Storage Temperature	< 90	°C
Operating Temperature	-20 to 80	°C

General Data:
Transmission [%]: 90 (670 nm)
Lens Material: COP

Specifications subject to change without notice.