

Datasheet Plastic Collimator Lens CAY046/055

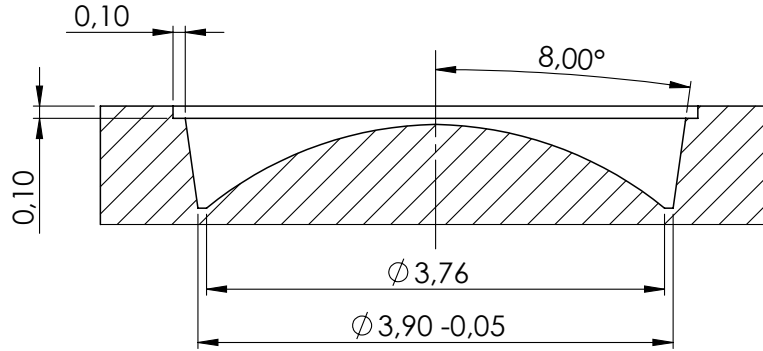
These data concern a full plastic bi-aspherical lens. It is specified for use as a collimator in combination with a diode laser. It can be mounted by use of glue or spring-loaded. Mechanical lock-mounting is not advisable because of possible distortions.

| Parameters | Wavelength | | Unit |
|--|------------|--------|------|
| | 670 nm | 785 nm | |
| Design conditions | | | |
| <i>N.A.</i> | 0.37 | | -- |
| Clear Aperture <i>CA</i> | 3.4 | | mm |
| Designed with laser cover glass (<i>BK7</i>) on source side: | | | |
| Distance from source | 0.55 | | mm |
| Glass thickness | 0.25 | | mm |
| Optical parameters | | | |
| Focal Length | 4.60 | 4.64 | mm |
| Back Focal Length <i>BFL</i> (<i>with BK7 coverglass</i>) | 3.18 | 3.20 | mm |
| Free Working Distance <i>FWD</i> | 2.98 | 3.00 | mm |
| <i>RMS</i> mean | on axis | 30 | mλ |
| <i>RMS</i> max. ($\pm 3\sigma$) | on axis | 40 | mλ |
| Optical Tolerance | 0.1 | | mm |
| Field Radius | 0.1 | | mm |
| Mechanical parameters | | | |
| Mounting hole diameter D_{mh} | Ø 5.50 | | mm |
| Other parameters: see drawing | | | |
| Environmental stability | | | |
| Storage Temperature | -25 to 70 | | °C |
| Operating Temperature | 5 to 65 | | °C |

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

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

Revision Date: 01.11.2016



DETAIL B
SCALE 20 : 1

SECTION A-A

