

Automotive

Datasheet Plastic Collimator Lens CAY033

These data concern a full plastic bi-aspherical lens. It is specified for use as a collimator in combination with a diode laser. The lens is AR-coated for 785 nm. 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>	0.40		--
Clear Aperture <i>CA</i>	2.7		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	3.30	3.32	mm
Back Focal Length <i>BFL</i> (with 0.25mm laserglas)	2.08	2.10	mm
Free Working Distance <i>FWD</i>	1.98	2.00	mm
<i>RMS</i> mean	30		$m\lambda$
	on axis		
	total		
<i>RMS</i> max. ($\pm 3\sigma$)	40		$m\lambda$
	on axis		
	total		$m\lambda$
Optical Tolerance	0.1		mm
Field Radius	0.05		mm
Mechanical parameters			
Mounting hole diameter D_{mh}	$\varnothing 7.40 (+ 0.03)$		mm
Other parameters: see drawing			
Environmental stability			
Storage Temperature	-25 to 70		$^{\circ}\text{C}$
Operating Temperature	5 to 65		$^{\circ}\text{C}$

General Data:
Transmission: 95 % for 785 nm
Lens Material: Acrylic

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

© Helvoet Rubber & Plastic Technologies NV. All rights reserved. Reproduction prohibited without written permission from the copyright owner

Automotive

© Helvoet Rubber & Plastic Technologies NV. All rights reserved. Reproduction prohibited without written permission from the copyright owner

