

## **Fast Axis Collimator**

# $FAC300 (BFL = 80\mu m)$



### **Features and Advantages**

Acylindrical lens for the collimation of the fast axis of diode lasers.

The new revision has an increased power content of >92% within  $\pm$  2.2 mrad and >94% of the energy within Gaussian distribution (negligible side peaks).

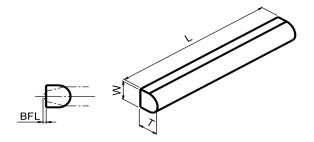
#### **Product Specifications**

| Specification Data                                 | Unit  | Value                |  |
|--|---|----------------------|--|
| Material   |   | S-TIH53 (Ohara)      |  |
| Width (W)  | mm  | $0.5 \pm 0.05$       |  |
| Thickness (T)                                      | mm  | $0.4 \pm 0.01$       |  |
| Clear aperture                                     | mm²   | $(L-0.5) \times 0.4$ |  |
| Refractive index n @ 976 nm                        |   | 1.814                |  |
| Effective focal length (EFL) @ 976 nm              | mm  | 0.30                 |  |
| Back focal length (BFL) @ 976 nm                   | mm  | 0.08                 |  |
| Numerical aperture (NA)                            |   | 0.7                  |  |
| Transmission                                       | %   | > 99                 |  |
| Power within an angle of ± 2.2 mrad <sup>(1)</sup> | %   | > 92                 |  |
| Power within Gaussian distribution                 | %   | > 94                 |  |
| Surface imperfections (DIN ISO 10110-7)            | 5/2x0.025; C2x0.1; L2x0.025; E <sup>(2)</sup> |                      |  |

| Product Code       |      | ZLE002600      | ZLE002604      | ZLE002075 <sup>(3)</sup> |
|--------------------|------|----------------|----------------|--------------------------|
| Specification Data | Unit | Value          | Value          | Value                    |
| Length (L)         | mm   | $4.0 \pm 0.05$ | $3.0 \pm 0.05$ | $2.0 \pm 0.05$           |
| AR-Coating         | nm   | 770 - 1070     | 770 - 1070     | 770 - 1070               |

 $<sup>^{\</sup>left(1\right)}$  Valid for an emitter-height of  $1\mu m$  and no smile of the laser diode.

#### **Product Dimensions (mm)**



Rev 04 | Updated January 7, 2025 | RoHS compliant 2011/65/EU and 2015/863/EU

 $<sup>^{\</sup>left(2\right)}$  Chipping on short edge 0.2, chipping on long edge 0.05.

<sup>(3)</sup> Example for customization — design, dimensions & coatings on request.