

# Fast Axis Collimator

## FAC300 (BFL = 52μm)



### 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 ± 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	0.55 ± 0.05
Thickness (T)	mm	0.45 ± 0.01
Clear aperture	mm <sup>2</sup>	(L-0.5) × 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	0.052
Numerical aperture (NA)		0.8
Transmission	%	> 99
Power within an angle of ± 2.2 mrad <sup>(1)</sup>	%	> 92
Power within Gaussian distribution	%	> 94

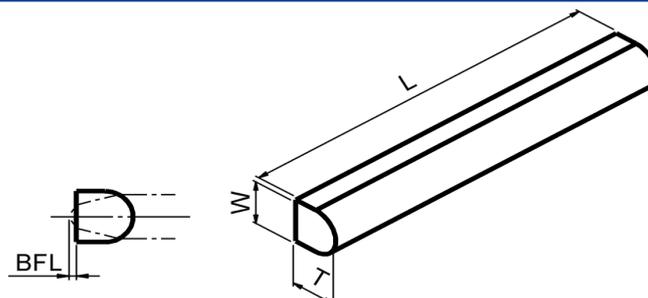
Product Code	ZLE001262 <sup>(3)</sup>	ZLE001923 <sup>(3)</sup>	ZLE001258 <sup>(3)</sup>	ZLE002099 <sup>(3)</sup>	
<b>Specification Data</b>	<b>Unit</b>	<b>Value</b>	<b>Value</b>	<b>Value</b>	
Length (L)	mm	2.0 ± 0.05	4.0 ± 0.05	12.0 ± 0.05	3.0 ± 0.05
AR-Coating	nm	790 - 990	790 - 990	790 - 990	760 - 850
Surface imperfections (DIN ISO 10110-7)		5/2x0.025; C2x0.1; L2x0.025; E <sup>(2)</sup>	5/5x0.025; C2x0.1; L2x0.025; E <sup>(2)</sup>	5/2x0.1; C2x0.1; L2x0.025; E <sup>(2)</sup>	5/2x0.025; C2x0.1; L2x0.025; E <sup>(2)</sup>

<sup>(1)</sup> Valid for an emitter-height of 1μm and no smile of the laser diode.

<sup>(2)</sup> Chipping on short edge 0.2, chipping on long edge 0.08.

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

### Product Drawing (mm)



Rev 03 | Updated June 8, 2022 | RoHS compliant 2011/65/EU and 2015/863/EU