

Fast Axis Collimator

FAC300 (BFL = 52 μ 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 ± 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 \pm 0.05
Thickness (T)	mm	0.45 \pm 0.01
Clear aperture	mm ²	(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	0.052
Numerical aperture (NA)		0.8
Transmission	%	> 99
Power within an angle of ± 2.2 mrad ⁽¹⁾	%	> 92
Power within Gaussian distribution	%	> 94

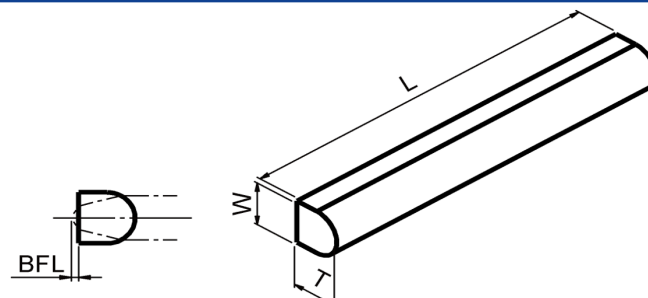
Product Code	ZLE001262 ⁽³⁾	ZLE001923 ⁽³⁾	ZLE001258 ⁽³⁾	ZLE002099 ⁽³⁾	
Specification Data	Unit	Value			
Length (L)	mm	2.0 \pm 0.05	4.0 \pm 0.05	12.0 \pm 0.05	3.0 \pm 0.05
AR-Coating	nm	790 - 990	790 - 990	790 - 990	760 - 850
Surface imperfections (DIN ISO 10110-7)		5/2x0.025; C2x0.1; L2x0.025; E ⁽²⁾	5/5x0.025;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

⁽¹⁾ Valid for an emitter-height of 1 μ m and no smile of the laser diode.

⁽²⁾ Chipping on short edge 0.2, chipping on long edge 0.08.

⁽³⁾ Example for customization – design, dimensions & coatings on request.

Product Drawing (mm)



Rev 02 | Updated April 16, 2021 | RoHS compliant 2011/65/EU and 2015/863/EU