

Fast Axis Collimator

FAC360



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 ± 1.8 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	0.6 ± 0.05
Thickness (T)	mm	0.53 ± 0.01
Clear aperture	mm ²	$(L-0.5) \times 0.5$
Refractive index n @ 940 nm		1.816
Effective focal length (EFL) @ 940 nm	mm	0.36
Back focal length (BFL) @ 940 nm	mm	0.07
Numerical aperture (NA)		0.8
Transmission	%	> 99
Power within an angle of ± 1.8 mrad ⁽¹⁾	%	> 92
Power within Gaussian distribution	%	> 94

Product Code	ZLE002384	ZLE002601 ⁽³⁾
Specification Data	Unit	Value
Length (L)	mm	4.0 ± 0.05 4.5 ± 0.05
AR-Coating	nm	770 - 1070 770 - 1070
Surface imperfections (DIN ISO 10110-7)	5/2x0.025; C2x0.1; L2x0.02; E ⁽²⁾	5/4x0.025; 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)

