

Fast Axis Collimator

FAC590 (W1.0)



Features and Advantages

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

Product Specifications

Specification Data	Unit	Value
Material		S-TiH53 (Ohara)
Width (W)	mm	1.0 ± 0.05
Thickness (T)	mm	0.8 ± 0.01
Refractive index n @ 808 nm		1.823
Effective focal length (EFL) @ 808 nm	mm	0.59
Back focal length (BFL) @ 808 nm	mm	0.15
Numerical aperture (NA)		0.8
Power within an angle of ± 1.1 mrad ⁽¹⁾	%	> 85

Product Code	ZLE001581 ⁽³⁾	ZLE000627	ZLE001319 ⁽³⁾	ZLE000115	ZLE001684 ⁽³⁾	MOD000362 ⁽³⁾⁽⁴⁾
Specification Data	Unit	Value				
Length (L)	mm	1.8 ± 0.05	5.6 ± 0.05	12.0 ± 0.05	12.0 ± 0.05	12.0 ± 0.05
Clear aperture	mm ²	1.3 x 0.9	4.8 x 0.9	11.5 x 0.9	11.5 x 0.9	11.5 x 0.9
AR-Coating	nm	905 - 925	770 - 1070	600 - 700	790 - 990	1000 - 1600
Transmission	%	> 99.5	> 99	> 99	> 99	> 99
Surface imperfections (DIN ISO 10110-7)		5/3x0.025; C2x0.1; L2x0.025; E ⁽²⁾	5/5x0.025; C2x0.04; L2x0.025; E0.05	5/10x0.025; C2x0.1; L3x0.025; E ⁽²⁾	5/10x0.025; C2x0.1; L3x0.025; E ⁽²⁾	5/10x0.025; C2x0.1; L3x0.025; E ⁽²⁾

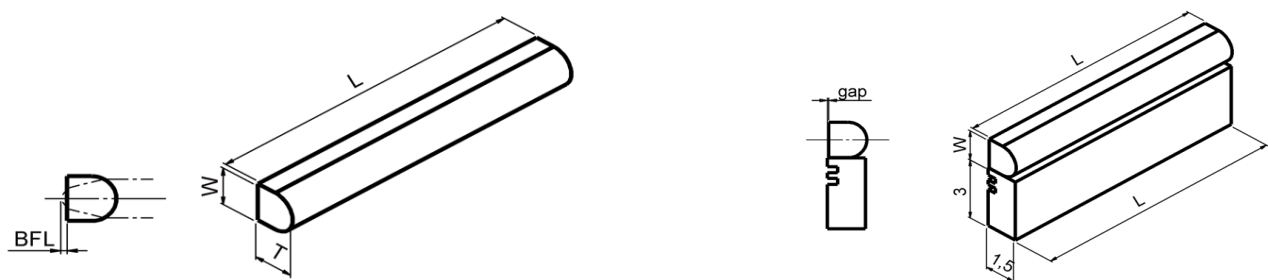
⁽¹⁾ Valid for an emitter-height of 1µm and no smile of the laser diode.

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

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

⁽⁴⁾ ZLE000115 with bottom tab (gap 0.1 mm).

Product Drawing (mm)



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