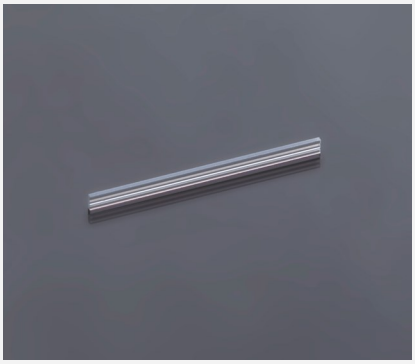
Fast Axis Collimator

FAC160



Features and Advantages

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

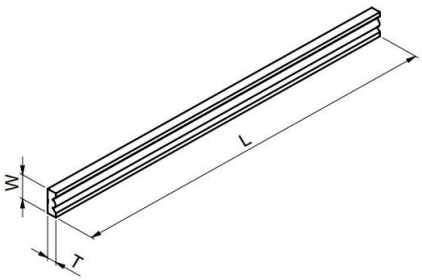
Product Specifications

Specification Data	Unit	Value
Material		High-Index IR (Ohara)
Width (W)	mm	0.8 ± 0.05
Thickness (T)	mm	0.25 ± 0.01
Clear aperture	mm²	(L-0.5) x 0.25
Refractive index n @ 980 nm		› 1.9
Effective focal length (EFL) @ 980 nm	mm	0.160
Back focal length (BFL) @ 980 nm	mm	0.034
Numerical aperture (NA)		0.8
Transmission	%	› 99
Power within an angle of ± 3.6 mrad[1]	%	› 85

Product Code		ZLE001942[2]	ZLE001939[2]	ZLE002012[2]
Specification Data	**Unit**	**Value**		
Length (L)	mm	12.0 ± 0.05	12.0 ± 0.05	12.0 ± 0.05
AR-Coating	nm	790 - 990	600 - 700	948 - 998
Surface imperfections (DIN ISO 10110-7)		5/7x0.025; C4x0.1; L6x0.025; E0.2	5/7x0.025; C4x0.1; L6x0.025; E0.2	5/7x0.025; C4x0.1; L6x0.025; E0.2

[1] Valid for an emitter-height of 1µm and no smile of the laser diode.
[2] Example for customization — design, dimensions & coatings on request.

Product Drawing (mm)



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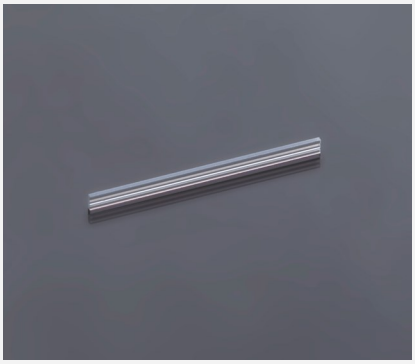
Fast Axis Collimator

FAC160 FS



Features and Advantages

Acylindrical biconvex lens for the collimation of the fast axis of diode lasers. The lens is made of low OH fused silica and optimized for diode laser bars with power > 300 W CW.

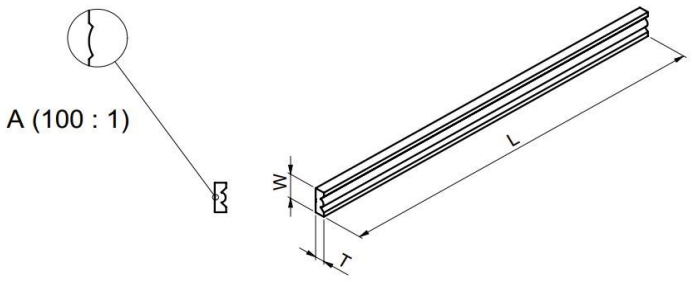
Product Specifications

Specification Data	Unit	Value
Material		Fused Silica
Width (W)	mm	0.8 ± 0.05
Thickness (T)	mm	0.3 ± 0.01
Refractive index n @ 980 nm		1.451
Effective focal length (EFL) @ 980 nm	mm	0.160
Back focal length (BFL) @ 980 nm	mm	0.034
Numerical aperture (NA)		0.8
Transmission	%	> 99
Power within an angle of ± 3.6 mrad[1]	%	> 85

Product Code		ZLE002070[2]
Specification Data	**Unit**	**Value**
Length (L)	mm	12.0 ± 0.05
Clear aperture (Side A)	mm²	10.5 x 0.027
Clear aperture (Side B)	mm²	10.5 x 0.262
AR-Coating	nm	940 - 998
Surface imperfections (DIN ISO 10110-7)		5/5x0.025; C2x0.1; L2x0.025; E0.2

[1] Valid for an emitter-height of 1µm and no smile of the laser diode.
[2] Example for customization — design, dimensions & coatings on request.

Product Drawing (mm)



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Fast Axis Collimator

FAC200

Features and Advantages

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

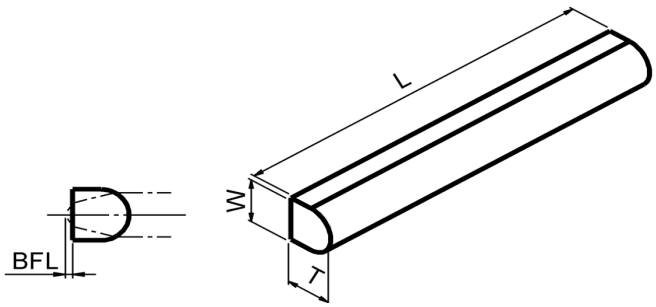
Product Specifications

Specification Data	Unit	Value
Material		High-Index IR (Ohara)
Width (W)	mm	0.37 ± 0.05
Thickness (T)	mm	0.326 ± 0.01
Clear aperture	mm²	(L-0.5) x 0.27
Refractive index n @ 940 nm		› 1.9
Effective focal length (EFL) @ 940 nm	mm	0.20
Back focal length (BFL) @ 940 nm	mm	0.03
Numerical aperture (NA)		0.8
Transmission	%	› 99
Power within an angle of ± 3.3 mrad[1]	%	› 85

Product Code		ZLE001774[3]	ZLE002137[3]	ZLE002097[3]	ZLE002142[3]
Specification Data	**Unit**	**Value**			
Length (L)	mm	3.15 ± 0.05	4.0 ± 0.05	3.15 ± 0.05	4.0 ± 0.05
AR-Coating	nm	900 - 1000	790 - 990	600 - 700	785 - 810
Surface imperfections (DIN ISO 10110-7)		5/2x0.025; C2x0.1; L2x0.025; E[2]	5/3x0.025; C3x0.1; L3x0.025; E[2]	5/2x0.025; C2x0.1; L2x0.025; E[2]	5/3x0.025; C3x0.1; L3x0.025; E[2]

[1] Valid for an emitter-height of 1 µm 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)



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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).

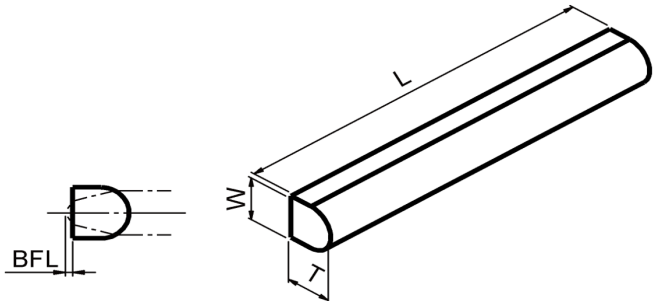
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	0.55 ± 0.05
Thickness (T)	mm	0.45 ± 0.01
Clear aperture	mm²	(L-0.5) x 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 ± 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[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 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.

Product Drawing (mm)



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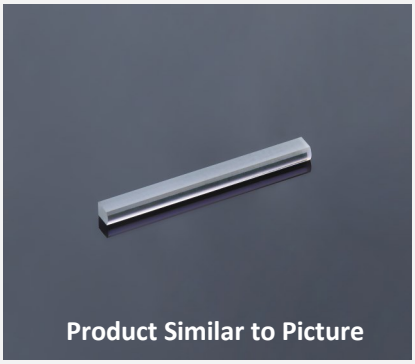
Fast Axis Collimator

Blue FAC300 (BFL = 70µm)



Features and Advantages

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

Power Enclosure >92% within ± 1.2 mrad and >94% of the energy within Gaussian distribution.

Product Specifications

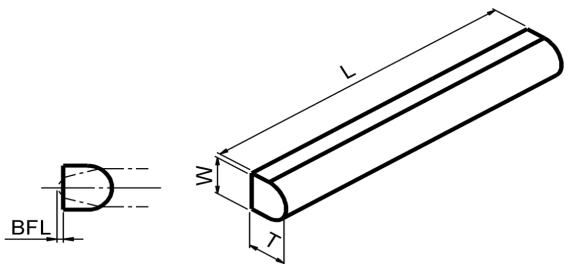
Specification Data	Unit	Value
Material		FL-Blue
Width (W)	mm	0.5 ± 0.05
Thickness (T)	mm	0.41 ± 0.01
Clear aperture	mm²	(L-0.5) x 0.4
Refractive index n @ 450nm		>1.75
Effective focal length (EFL) @ 450nm	mm	0.30
Back focal length (BFL) @ 450nm	mm	0.07
Numerical aperture (NA)		0.7
Transmission	%	> 99
Power within an angle of +/- 1.2 mrad(1)	%	> 92
Power within Gaussian distribution	%	> 94
Surface imperfections (DIN ISO 10110-7)		5/2x0.025; C2x0.1; L2x0.025; E(2)

Product Code **ZLE002382**

Specification Data	Unit	Value
Length (L)	mm	4.0 ± 0.05
AR-Coating	nm	430 - 470

(1) Valid for an emitter-height of 0.7 µm 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 Dimensions (mm)



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Fast Axis Collimator

FAC300 (BFL = 80µm)

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).

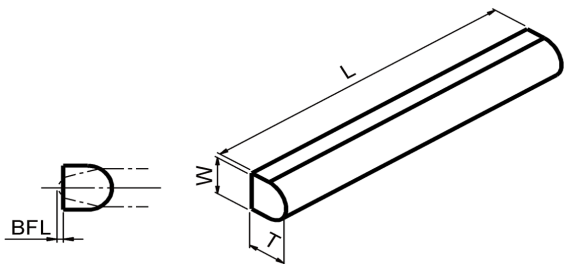
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	0.5 ± 0.05
Thickness (T)	mm	0.4 ± 0.01
Clear aperture	mm²	(L-0.5) x 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[1]	%	> 92
Power within Gaussian distribution	%	> 94
Surface imperfections (DIN ISO 10110-7)		5/2x0.025; C2x0.1; L2x0.025; E[2]

Product Code		ZLE002076	ZLE002074	ZLE002075[3]
Specification Data	**Unit**	**Value**	**Value**	**Value**
Length (L)	mm	4.0 ± 0.05	3.0 ± 0.05	2.0 ± 0.05
AR-Coating	nm	770 - 1070	770 - 1070	770 - 1070

[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 0.05.
[3] Example for customization — design, dimensions & coatings on request.

Product Dimensions (mm)



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

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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 ± 2.2 mrad and >94% of the energy within Gaussian distribution (negligible side peaks).

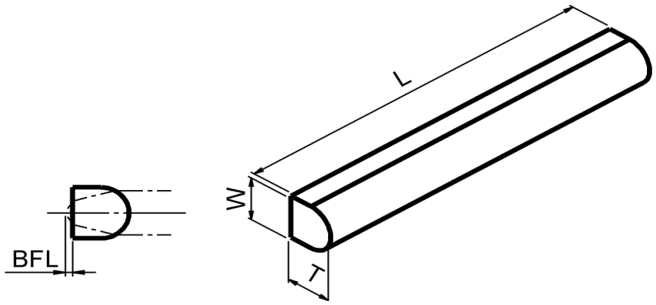
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	0.6 ± 0.05
Thickness (T)	mm	0.53 ± 0.01
Clear aperture	mm²	(L-0.5) x 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		ZLE002148	ZLE002214[3]	ZLE002290[3]
Specification Data	Unit	Value		
Length (L)	mm	4.0 ± 0.05	8.55 ± 0.05	4.0 ± 0.05
AR-Coating	nm	770 - 1070	770 - 1070	900 - 1100
Surface imperfections (DIN ISO 10110-7)		5/2x0.025; C2x0.1; L2x0.02; E[2]	5/4x0.025; C2x0.1; L2x0.025; E[2]	5/2x0.025; C2x0.1; L2x0.025; E[2]

[1] Valid for an emitter-height of 1 µm 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)



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Fast Axis Collimator

FAC510

Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers.

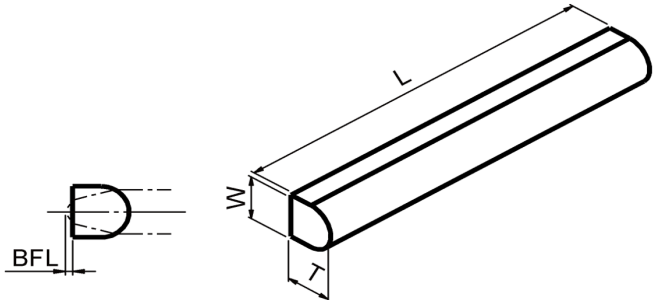
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	0.78 ± 0.05
Thickness (T)	mm	0.78 ± 0.02
Refractive index n @ 975 nm		1.814
Effective focal length (EFL) @ 975 nm	mm	0.51
Back focal length (BFL) @ 975 nm	mm	0.078
Numerical aperture (NA)		0.8
Transmission	%	› 99.5
Power within an angle of ± 1.5 mrad[1]	%	› 90

Product Code		ZLE002153[3]	ZLE002278[3]
Specification Data	**Unit**	**Value**	
Length (L)	mm	3.20 ± 0.05	6.0 ± 0.05
Clear aperture	mm²	2.0 x 0.6	5.0 x 0.6
AR-Coating	nm	965 - 990	965 - 990
Surface imperfections (DIN ISO 10110-7)		5/5x0.025; C2x0.1; L2x0.025; E0.2[2]	5/8x0.025; C2x0.1; L2x0.025; E0.2[2]

[1] Valid for an emitter-height of 1 µm 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)



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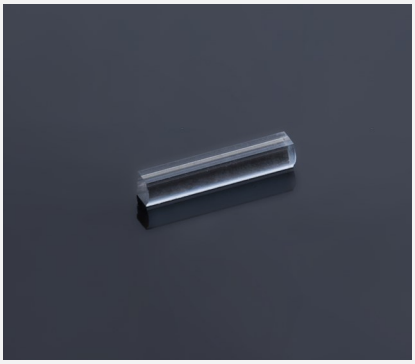
Fast Axis Collimator

FAC570 FS



Features and Advantages

Acylindrical biconvex lens for the collimation of the fast axis of diode lasers. The lens is made of fused silica and optimized for high power transmission so that it withstands powers of 300 W or even higher.

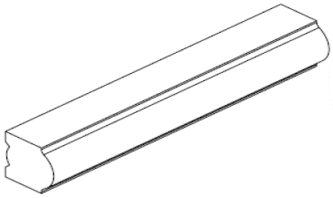
Product Specifications

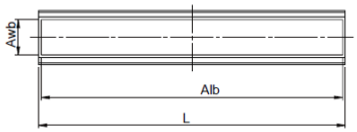
Specification Data	Unit	Value
Material		Fused Silica
Width (W)	mm	1.0 ± 0.05
Thickness (T)	mm	0.96 ± 0.05
Refractive index n @ 450 nm		1.466
Effective focal length (EFL) @ 450 nm	mm	0.57
Back focal length (BFL) @ 450 nm	mm	0.17
Numerical aperture (NA)		0.58
Transmission / AOI	% / °	› 99 / 0-30
Power within an angle of ± 1.1 mrad[1]	%	› 90

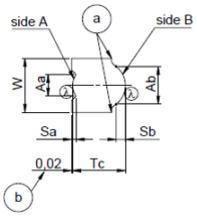
Product Code		ZLE002217[3]	ZLE002150	ZLE002284[3]	ZLE002270[3]
Specification Data	**Unit**	**Value**			
Length (L)	mm	14.0 ± 0.1	5.6 ± 0.1	4.0 ± 0.1	14.0 ± 0.1
Clear aperture (Side A)	mm²	13.0 x 0.4	5.0 x 0.4	3.8 x 0.4	13.0 x 0.4
Clear aperture (Side B)	mm²	13.0 x 0.65	5.0 x 0.65	3.8 x 0.65	13.0 x 0.6
AR-Coating	nm	400 - 480	400 - 480	400 - 480	790 - 990
Surface imperfections (DIN ISO 10110-7)		5/5x0.025; C2x0.04; L2x0.025; E[2]	5/5x0.025; C2x0.04; L2x0.025; E[2]	5/2x0.1; C2x0.1; L2x0.025; E[2]	5/5x0.025; C2x0.04; L2x0.025; E[2]

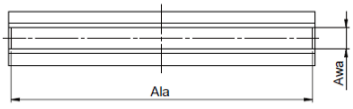
[1] Valid for an emitter-height of 1µm and no smile of the laser diode.
[2] Chipping on short edge 0.2, chipping on long edge 0.08.
[3] Example for customization — design, dimensions & coatings on request.

Product Drawing (mm)









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

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Fast Axis Collimator

FAC590 (W0.8)

Features and Advantages

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

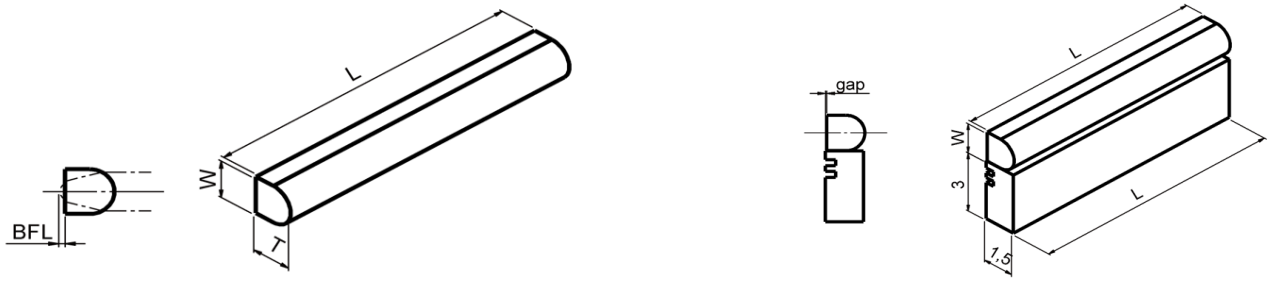
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	0.8 ± 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)		0.6
Transmission	%	> 99
Power within an angle of ± 1.1 mrad[1]	%	> 85

Product Code		ZLE002131[3]	ZLE002155[3]	ZLE002163[3]
Specification Data	**Unit**	**Value**		
Length (L)	mm	8.2 ± 0.1	8.2 ± 0.1	11.58 ± 0.1
Clear aperture	mm²	7.0 x 0.7	7.0 x 0.7	11.0 x 0.7
AR-Coating	nm	790 - 990	600 - 700	790 - 1070
Surface imperfections (DIN ISO 10110-7)		5/8x0.025; C2x0.1; L2x0.025; E[2]	5/8x0.025; C2x0.1; L2x0.025; E[2]	5/8x0.025; C2x0.1; L2x0.025; E[2]

[1] Valid for an emitter-height of 1 µm 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)



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Fast Axis Collimator

FAC590 (W1.0)

Features and Advantages

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

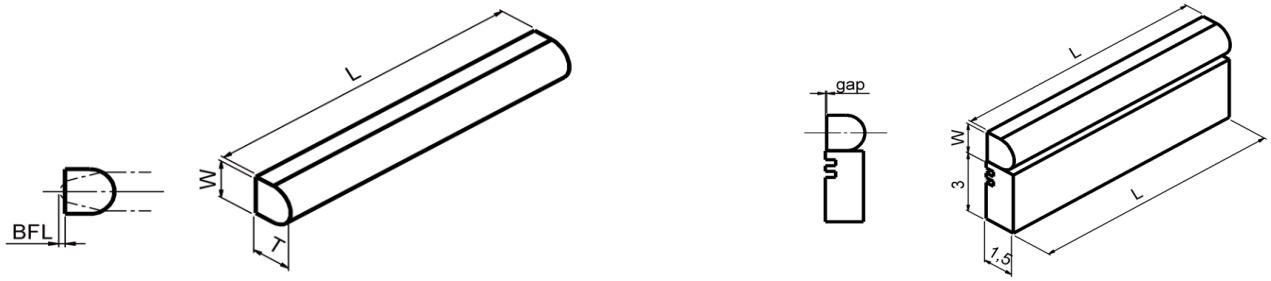
Product Specifications

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	12.0 ± 0.05
Clear aperture	mm²	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	11.5 x 0.9
AR-Coating	nm	905 - 925	770 - 1070	600 - 700	790 - 990	1000 - 1600	790 - 990
Transmission	%	> 99.5	> 99	> 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]	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)



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Fast Axis Collimator

FAC910

Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers.

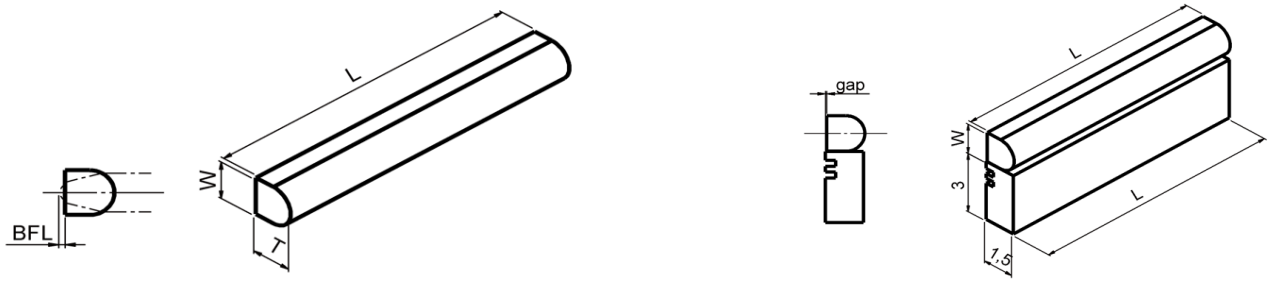
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	1.5 ± 0.05
Thickness (T)	mm	1.5 ± 0.01
Clear aperture	mm²	(L-0.5) x 1.4
Refractive index n @ 808 nm		1.823
Effective focal length (EFL) @ 808 nm	mm	0.91
Back focal length (BFL) @ 808 nm	mm	0.09
Numerical aperture (NA)		0.8
Transmission	%	› 99
Power within an angle of ± 0.7 mrad[1]	%	› 85
Surface imperfections (DIN ISO 10110-7)		5/12x0.025; C2x0.1; L2x0.025; E[2]

Product Code		ZLE001410[3]	ZLE000178	ZLE000548[3]	MOD000554[4]
Specification Data	**Unit**	**Value**			
Length (L)	mm	12.0 ± 0.05	12.0 ± 0.05	12.0 ± 0.05	12.0 ± 0.05
AR-Coating	nm	600 - 700	790 - 990	1000 - 1600	790 - 990

[1] Valid for an emitter-height of 1 µm 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, bottom/side tabs & coatings on request.
[4] ZLE000178 with bottom tab (gap 0.05 mm).

Product Drawing (mm)



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Fast Axis Collimator

FAC1100

Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers.

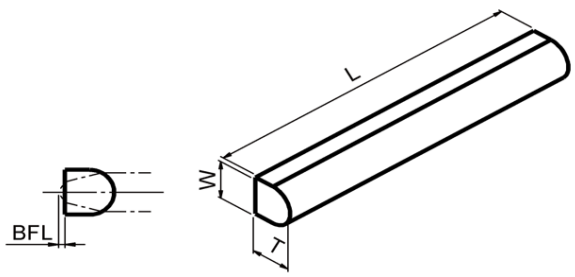
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	1.50 ± 0.05
Thickness (T)	mm	1.72 ± 0.01
Refractive index n @ 950 nm		1.815
Effective focal length (EFL) @ 950 nm	mm	1.10
Back focal length (BFL) @ 950 nm	mm	0.152
Numerical aperture (NA)		0.7
Transmission	%	› 99
Power within an angle of ± 0.6 mrad[1]	%	› 85

Product Code		ZLE001955[3]	ZLE002021[3]	ZLE002216[3]
Specification Data	**Unit**	**Value**		
Length (L)	mm	12.0 ± 0.05	2.0 ± 0.1	4.0 ± 0.1
Clear aperture	mm²	11 x 1.4	1 x 1.4	3.5 x 1.4
AR-Coating	nm	790 - 990	790 - 990	790 - 990
Surface imperfections (DIN ISO 10110-7)		5/12x0.025; C2x0.1; L2x0.025; E[2]	5/3x0.025; C2x0.1; L2x0.025; E[2]	5/5x0.025; C2x0.1; L2x0.025; E[2]

[1] Valid for an emitter-height of 1 µm 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)



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Fast Axis Collimator

FAC1500 (BFL=150µm)

Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers.

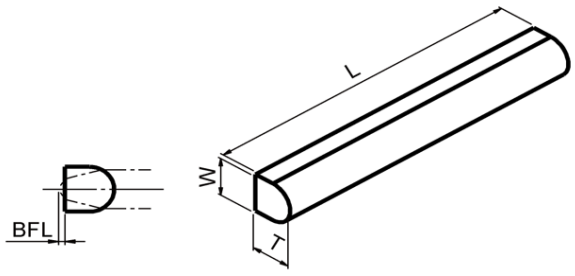
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	2.0 ± 0.05
Thickness (T)	mm	2.46 ± 0.01
Refractive index n @ 808 nm		1.823
Effective focal length (EFL) @ 808 nm	mm	1.50
Back focal length (BFL) @ 808 nm	mm	0.150
Numerical aperture (NA)		0.7
Transmission	%	› 99
Power within an angle of ± 0.45 mrad[1]	%	› 85

Product Code		ZLE001960	ZLE002277[3]
Specification Data	**Unit**	**Value**	
Length (L)	mm	12.0 ± 0.05	4.0 ± 0.1
Clear aperture	mm²	11 x 1.9	3 x 1.9
AR-Coating	nm	790 - 990	790 - 990
Surface imperfections (DIN ISO 10110-7)		5/12x0.025; C2x0.1; L2x0.025; E[2]	5/5x0.025; C2x0.1; L2x0.025; E[2]

[1] Valid for an emitter-height of 1 µm 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)



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Fast Axis Collimator

FAC1500 (BFL=490µm)

Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers.

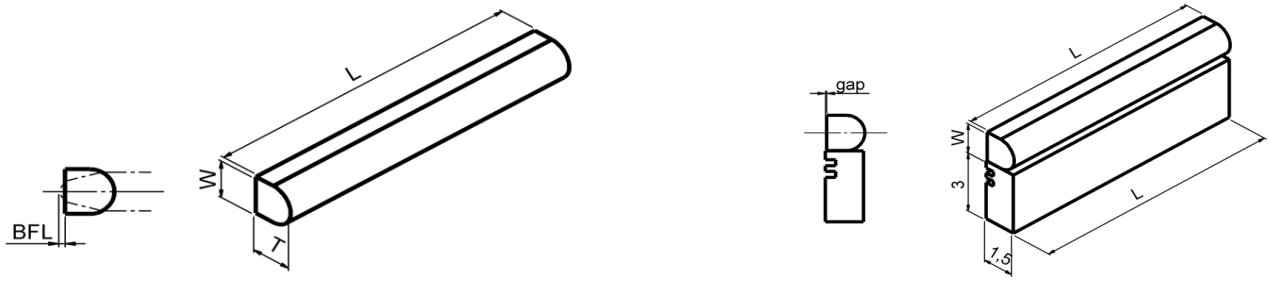
Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	1.65 ± 0.05
Thickness (T)	mm	1.82 ± 0.01
Refractive index n @ 808 nm		1.823
Effective focal length (EFL) @ 808 nm	mm	1.49
Back focal length (BFL) @ 808 nm	mm	0.49
Numerical aperture (NA)		0.5
Transmission	%	› 99
Power within an angle of ± 0.8 mrad[1]	%	› 85

Product Code		ZLE001250	ZLE001603[3]	ZLE000729[3]
Specification Data	**Unit**	**Value**		
Length (L)	mm	12.0 ± 0.05	2.0 ± 0.05	4.0 ± 0.05
Clear aperture	mm²	11 x 1.5	1.5 x 1.5	3.5 x 1.5
AR-Coating	nm	790 - 990	790 - 990	1000 - 1600
Surface imperfections (DIN ISO 10110-7)		5/5x0.025; C2x0.063; L2x0.025; E[2]	5/3x0.025; C2x0.1; L1x0.025; E[2]	5/5x0.025; C1x0.1; L1x0.025; E[2]

[1] Valid for an emitter-height of 1 µm 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 03 | Updated June 8, 2022 | **RoHS compliant** 2011/65/EU and 2015/863/EU

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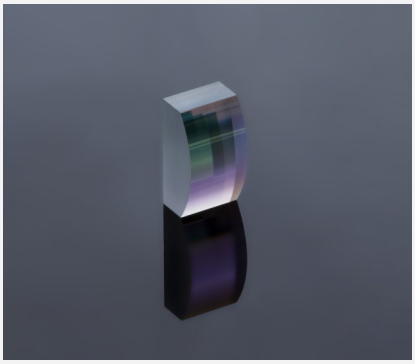
Fast Axis Collimator

FAC3000 (BFL=2 mm)



Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers. Optimized for nano-stack emitters and LiDAR applications.

Product Specifications

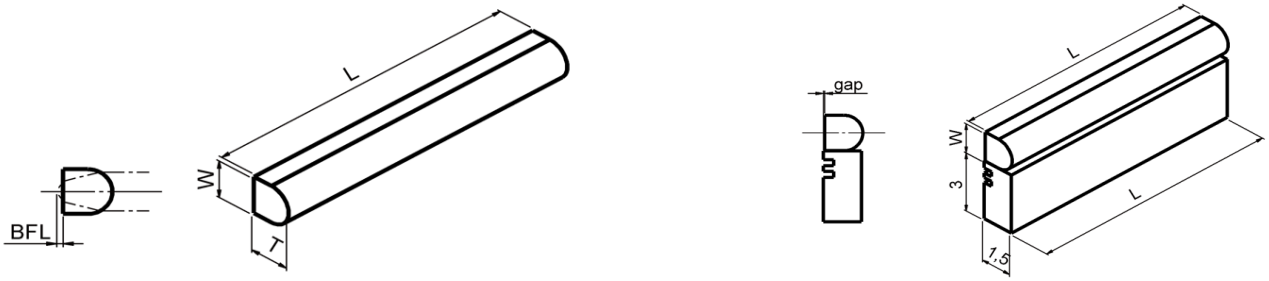
Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	3.20 ± 0.05
Thickness (T)	mm	1.818 ± 0.02
Refractive index n @ 905 nm		1.817
Effective focal length (EFL) @ 905 nm	mm	3.0
Back focal length (BFL) @ 905 nm	mm	2.0
Numerical aperture (NA)		0.6
Transmission	%	› 99
Power within an angle of ± 0.22 mrad for 1 µm height emitter[1]	%	› 90
Power within an angle of ± 2.2 mrad for 10 µm height nano-stack[1]	%	› 90

Product Code		ZLE002318	ZLE002319
Specification Data [2]	**Unit**	**Value**	
Length (L)	mm	2.1± 0.05	4.0 ± 0.05
Optimized for		4-channel nano-stack	8-channel nano-stack
Clear aperture	mm²	1.8 x 2.9	3.6 x 2.9
AR-Coating	nm	885 - 955	885 - 955
Surface imperfections (DIN ISO 10110-7)		5/5x0.063; C3x0.1; L4x0.025; E0.1	5/5x0.063; C3x0.1; L4x0.025; E0.1

[1] Valid for no smile of the laser diode.

[2] Customized design, dimensions, coatings & mounted glass tabs on request.

Product Drawing (mm)



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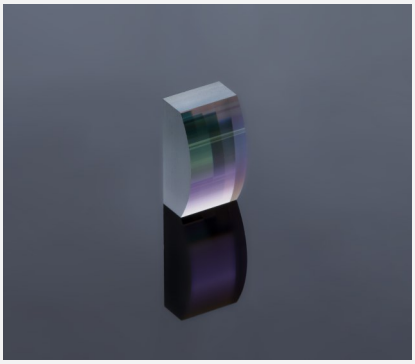
Fast Axis Collimator

FAC7700 (BFL=5 mm)



Features and Advantages

Aspherical cylindrical lens for the collimation of the fast axis of diode lasers. Optimized for nano-stack emitters and LiDAR applications with >99% power transmission.

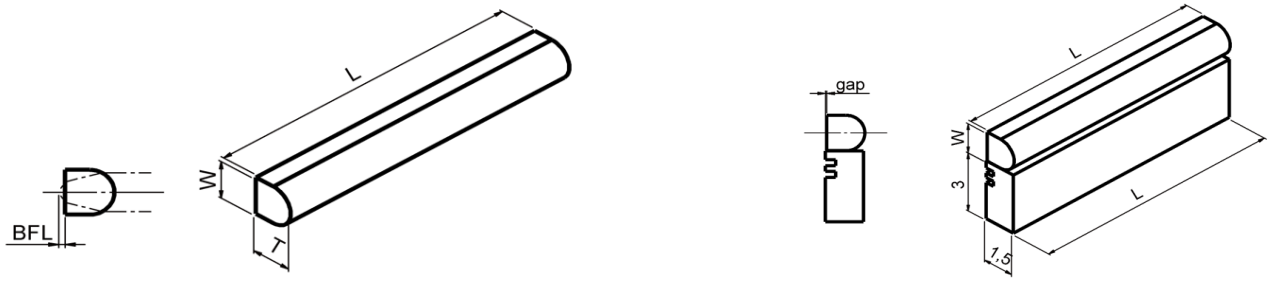
Product Specifications

Specification Data	Unit	Value
Material		S-BSL7 (Ohara)
Width (W)	mm	7.50 ± 0.08
Thickness (T)	mm	4.10 ± 0.02
Refractive index n @ 905 nm		1.508
Effective focal length (EFL) @ 905 nm	mm	7.7
Back focal length (BFL) @ 905 nm	mm	5.0
Numerical aperture (NA)		0.48
Transmission	%	> 99
Power within an angle of ± 0.85 mrad (FW0.1°) for 10 µm nano-stack[1]	%	> 80

Product Code		ZLE002310	ZLE002303
Specification Data[2]	**Unit**	**Value**	
Length (L)	mm	3.2 ± 0.08	4.9 ± 0.05
Optimized for		4-channel nano-stack	8-channel nano-stack
Clear aperture	mm²	2.8 x 7.1	4.5 x 7.1
AR-Coating	nm	885 - 935	885 - 935
Surface imperfections (DIN ISO 10110-7)		5/4x0.025; C2x0.1; 3x0.04; E0.15	5/4x0.025; C3x0.1; 4x0.04; E0.15

[1] Valid for no smile of the laser diode and using Osram SPL S4L90A nano stack.
[2] Customized design, dimensions, coatings & mounted glass tabs on request.

Product Drawing (mm)



Rev 05 | Updated June 8, 2022 | **RoHS compliant** 2011/65/EU and 2015/863/EU

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