# **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  $\pm$  2.2 mrad and >94% of the energy within Gaussian distribution (negligible side peaks).

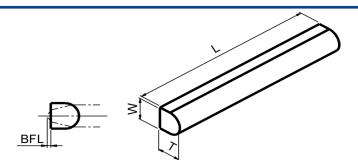
### **Product Specifications**

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Width (W)	mm	$0.6 \pm 0.05$
Thickness (T)	mm	$0.53 \pm 0.01$
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 <sup>(1)</sup>	%	> 92
Power within Gaussian distribution	%	> 94

Product Code		ZLE002148	ZLE002214 <sup>(3)</sup>	ZLE002290 <sup>(3)</sup>
Specification Data	Unit	Value		
Length (L)	mm	$4.0 \pm 0.05$	$8.55 \pm 0.05$	$4.0 \pm 0.05$
AR-Coating	nm	770 - 1070	770 - 1070	900 - 1100
Surface imperfections		5/2x0.025; C2x0.1;	5/4x0.025; C2x0.1;	5/2x0.025; C2x0.1;
(DIN ISO 10110-7)		L2x0.02; E <sup>(2)</sup>	L2x0.025; E <sup>(2)</sup>	L2x0.025; E <sup>(2)</sup>

 $<sup>^{(1)}</sup>$  Valid for an emitter-height of 1  $\mu m$  and no smile of the laser diode.

### **Product Drawing (mm)**



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

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

 $<sup>^{(3)}</sup>$  Example for customization — design, dimensions & coatings on request.