

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).

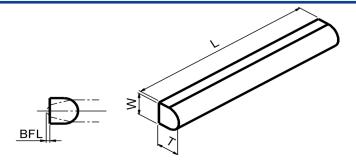
Product Specifications

| Specification Data | Unit | Value |
|--|------|-----------------|
| Material | | S-TIH53 (Ohara) |
| Width (W) | mm | 0.6 ± 0.05 |
| Thickness (T) | mm | 0.53 ± 0.01 |
| Clear aperture | 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 | | ZLE002384 | 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 | | 5/2x0.025; C2x0.1; | 5/4x0.025; C2x0.1; | 5/2x0.025; C2x0.1; |
| (DIN ISO 10110-7) | | L2x0.02; E ⁽²⁾ | L2x0.025; E ⁽²⁾ | L2x0.025; E ⁽²⁾ |

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

Product Drawing (mm)



Rev 05 | Updated September 6, 2023 | RoHS compliant 2011/65/EU and 2015/863/EU

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

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