

# 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 <sup>(1)</sup> | %    | > 85            |

| Product Code                            | ZLE001250       | ZLE001603 <sup>(3)</sup>                        | ZLE000729 <sup>(3)</sup>                      |   |
|---|-----------------|---|---|---|
| <b>Specification Data</b>               | <b>Unit</b>     | <b>Value</b>                                    | <b>Value</b>                                  |   |
| Length (L)                              | mm              | 12.0 ± 0.05                                     | 2.0 ± 0.05                                    | 4.0 ± 0.05                                    |
| Clear aperture                          | mm <sup>2</sup> | 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 <sup>(2)</sup> | 5/3x0.025; C2x0.1; L1x0.025; E <sup>(2)</sup> | 5/5x0.025; C1x0.1; L1x0.025; E <sup>(2)</sup> |

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

<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.

### Product Drawing (mm)

