



# OZ Optics

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## FUSED FIBER COLLIMATOR

**PRELIMINARY**

### Features

- Over 1 kW power handling
- Low insertion loss
- Low backreflection
- Available in a wide range of wavelengths
- Singlemode, multimode, polarization maintaining and large mode area fiber versions available
- No air-glass interfaces for maximum power handling
- Compact size

### Applications

- High power fiber optic device packaging, including isolators, ASE filters, beam combiners, splitters and integrated optics
- Laser marking, laser machining

### Specifications

- Wavelength: 600–2000nm
- Backreflection: >55dB
- Polarization Extinction Ratio: >20dB
- Beam Diameter: typically 0.5mm diameter

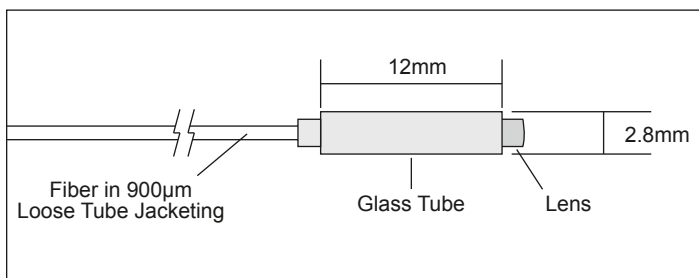
### Product description

OZ Optics offers fused fiber collimators designed to collimate light exiting a fiber to a desired beam diameter. In these components, the fiber and lens are fused together to produce a permanent connection with no air-glass interfaces, and with no epoxies in the optical path. The result is a compact collimator capable of handling extremely high laser powers, in excess of 1kW average power.

As these products demonstrate high power handling, parts are an ideal match for fiber laser systems and associated parts such as isolators, filters, beam splitters and combiners, as well as inside integrated assemblies. OZ optics offers these fused fiber collimators as a specialty item, and for detailed specifications please contact us at sales@ozoptics.com



**Fused fiber collimator**



**Figure 1. Fused fiber collimator drawing.**

## Questionnaire for custom parts

1. What wavelength of light will you be transmitting through the fiber?
2. Do you need multimode, singlemode, or polarization maintaining fiber?
3. What fiber core/cladding size do you prefer?
4. If you need a collimator, what size collimated beam do you need?
5. How long should the patchcord be, in meters?
6. Do you need a connector on the other end of the fiber? If so, what type?
7. What type of cabling do you need?
8. What is your average laser power? Is the power pulsed or CW? If pulsed, what are the pulsed conditions?

## Ordering information for custom parts

OZ Optics welcomes the opportunity to provide custom designed products to meet your application needs. As with most manufacturers, customized products do take additional effort so please expect some differences in the pricing compared to our standard parts list. In particular, we will need additional time to prepare a comprehensive quotation, and lead times will be longer than normal. These points will be carefully explained in your quotation, so your decision will be as well-informed as possible. We strongly recommend buying our standard products.

### Description

### Part number

Fused Fiber Collimator **FLPC-02.8-W-a/b-F-BD-BL-X-JD-L**

