

# Fiber End Caps

## 1-OS-3-2075-02

### Description

Catalog product family: Uncoated Optical Window/Substrates

Product code: 1-OS-3-2075-02

Fiber end caps help to extend the range of applications for fiber lasers to higher powers. The limiting factor that determines the maximum power that can be guided through a fiber is the power density at the fiber end faces. Due to the small diameter of fibers, extremely high power densities can cause scorching and damage to the end face. These detrimental effects can be avoided by using a fiber end cap. Beam divergence within an end cap leads to significantly lower power densities at the glass/air interface.



### Standard specifications

Substrate material	Corning 7979 0F
Total end cap length	20 (±0.02) mm
End cap diameter S1	7.5 (± 0.02) mm
Stem length	4 (±0.02) mm
Taper diameter S2	2 (± 0.05) mm
Taper angle, °	N/A
Clear aperture	>90%
Surface quality	10-5 S-D
Surface flatness	$\lambda/8 @ 633 \text{ nm}$ per CA
Parallelism	<3 arcmin
Edge chips	<0.05 mm
Coatings	AR (R<0.1%) on request
Absorption	<1 ppm