

## Silica/Silica Optical Fiber JTFIH-Ultra-Low-OH

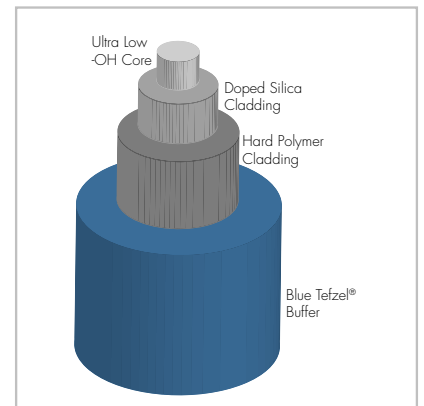
### Ultra-low-OH Quartz Fibers with Dual Clad

JTFIH step-index fibers are equipped with a so-called dual clad. The fiber core and inner cladding are made of quartz glass, whereas the outer cladding consists of a break-resistant polymer.

The dual clad has the following advantages: if light is coupled out of the fiber core, it is guided into the first cladding. For the most part, the power is retained and is available again when the light is coupled out.

JTFIH fibers are, therefore, primarily used as fibers for diode lasers in medical technology or as pump fibers in the laser industry.

The selection of standard buffer materials includes blue Tefzel® and other colors; acrylate, nylon, or Hytrel® can also be used.



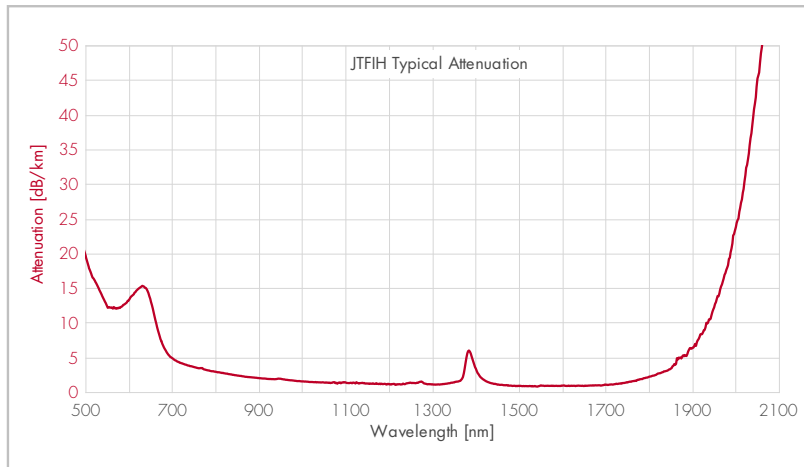
Fiber Design

### Characteristics

- Step index
- Numerical aperture:  $0.22 \pm 0.02$
- Vis-NIR transmission, 380 nm to 2.200 nm
- High laser damage threshold
- Sterilizable and bio-compatible – USP class VI\*
- Low -OH silica core, doped silica clad
- Hard polymer secondary cladding
- Standard buffer: Tefzel®
- Custom buffer: Acrylate, Nylon, or Hytrel®
- Operating temperature: -65 °C to +140 °C
- High-OH and custom sizes available

\* The end manufacturer is responsible for bio-compatibility and sterilization testing and validation studies.

Tefzel® and Hytrel® are registered trademarks of DuPont Corporation.



Typical Attenuation of the JTFIH Series

## Specifications

Fiber Type	JTFIH200	JTFIH272	JTFIH365	JTFIH400	JTFIH550	JTFIH600	JTFIH940
Dimensions	200/ 280/ 310/ 450	272/ 326/ 356/ 460	365/ 400/ 425/ 730	400/ 480/ 515/ 830	550/ 600/ 630/ 750	600/ 630/ 660/ 1040	940/ 1000/ 1035/ 1400
Design wavelength [μm]	850/1300	850/ 1300	850/ 1300	850/ 1300	850/ 1300	850/ 1300	850/ 1300
Temperature area [°C]	-65 ... +125	-65 ... +125	-65 ... +125	-65 ... +125	-65 ... +125	-65 ... +125	-65 ... +125
Numerical aperture	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Part number	3004468	3001114	3001117	3001113	3001839	3004589	3001840

Note:

The items listed in this table are standard configurations and sizes.

Other configurations may be available on request.