

## DirectLase™ 22/400 Yb-doped Optical Fiber

P/N: 8000147 - For Directed Energy Fiber-laser Systems



## **Product Description**

- Designed for multi-kilowatt, narrow-linewidth, directed energy fiber-laser systems
- Ytterbium-doped optical fiber with 19 μm modefield diameter and 400 μm cladding diameter
- High stimulated Brillouin scattering and transversemode instability thresholds.

| Product Specifications   |                               |          |         |
|--|-------------------------------|----------|---------|
| Product Description  | 22/400 Yb-doped Optical Fiber |          |         |
| Feature  | Min                           | Typical  | Max     |
| Optical Performance  |                               |          |         |
| Mode Field Diameter @ 1070 nm calculated from A <sub>eff</sub> | 17 µm                         | 19 µm    | 20 μm   |
| Cladding NA  |                               | 0.46     |         |
| Cladding Absorption @ 915 nm                                   | 0.4 dBm                       | 0.45 dBm | 0.5 dBm |
| Core Concentricity   |                               |          | ±1 μm   |
| 13 dB Cladding Absorption Length @ 976 nm                      |                               |          | 11 m    |
| Optical-Optical Efficiency @ 1070 nm                           | 80%                           |          |         |
| TMI Threshold @ 1070 nm  | 2.5 kW                        |          |         |
| Optimal Starting Bend Diameter                                 | 9 cm                          | 11 cm    | 12 cm   |
| Mechanical Performance   |                               |          |         |
| Equivalent Cladding Diameter                                   | 385 μm                        | 400 μm   | 415 µm  |
| Cladding Shape   |                               | Star     |         |
| Cladding Diameter  | 535 μm                        | 550 μm   | 565 μm  |
| Coating Material   | Low Index Polymer             |          |         |
| Proof Test Level   | 100 kpsi                      |          |         |
| Order by Part Number   |                               | 8000147  |         |

Specifications outlined below are for prototypes under development. Product specification is subject to change:

## For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.





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