



## HCS® 365 µm All Silica Low OH Step-Index Optical Fiber

P/N: CF01493-52

### Product Overview

Low OH concentration optimizes these fibers for use in the near-IR wavelengths. Biocompatibility features make these fibers ideal for laser surgery and other medical applications. The all-silica base construction also creates a high damage threshold and high-performance optical properties. High temperature environments require the use of PYROCOAT® polyimide coating.

### Typical Applications

- Aircraft/Industrial Cabling
- Engine Controls
- High-Power Laser Delivery
- Laser Surgery
- Laser Welding and Cutting
- Near-IR Spectroscopy
- Radiation Analysis
- Sensing

| <b>Product Specifications</b>       |                                                                                                                                                                                                                                                                                                          |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>          | <b>365 All Silica Low OH Step-Index</b>                                                                                                                                                                                                                                                                  |
| <b>Physical Characteristics</b>     |                                                                                                                                                                                                                                                                                                          |
| Core Diameter                       | 365 ± 10 µm                                                                                                                                                                                                                                                                                              |
| Cladding Diameter                   | 400 ± 10 µm                                                                                                                                                                                                                                                                                              |
| Coating Diameter                    | 430 +5/-10 µm                                                                                                                                                                                                                                                                                            |
| Buffer Diameter                     | 730 ± 30 µm                                                                                                                                                                                                                                                                                              |
| Core/Clad Offset                    | ≤ 9 µm                                                                                                                                                                                                                                                                                                   |
| Crimp & Cleave Compatible           | No                                                                                                                                                                                                                                                                                                       |
| Cladding Material                   | HCS fluoroacrylate                                                                                                                                                                                                                                                                                       |
| Buffer Material                     | ETFE                                                                                                                                                                                                                                                                                                     |
| Standard Buffer Color               | Natural                                                                                                                                                                                                                                                                                                  |
| <b>Optical Characteristics</b>      |                                                                                                                                                                                                                                                                                                          |
| Type                                | Multimode Step-Index                                                                                                                                                                                                                                                                                     |
| Numerical Aperture                  | 0.22                                                                                                                                                                                                                                                                                                     |
| Attenuation @ 850 nm                | ≤ 8 dB/km                                                                                                                                                                                                                                                                                                |
| Water Content                       | Low OH                                                                                                                                                                                                                                                                                                   |
| <b>Mechanical and Environmental</b> |                                                                                                                                                                                                                                                                                                          |
| Operating Temperature               | -65 to +125 °C                                                                                                                                                                                                                                                                                           |
| Short-Term Bend Radius              | ≥ 29 mm                                                                                                                                                                                                                                                                                                  |
| Long-Term Bend Radius               | ≥ 47 mm                                                                                                                                                                                                                                                                                                  |
| Proof Test Level                    | ≥ 100 kpsi (0.689 GPa)                                                                                                                                                                                                                                                                                   |
| <b>Order by Part Number</b>         | <b>CF01493-52</b>                                                                                                                                                                                                                                                                                        |
| <b>Product Description Code</b>     | <b>HCL-M0365T</b>                                                                                                                                                                                                                                                                                        |
| OPTIONS                             | Buffer Color, Buffer Diameter, Buffer Material, Cabling, Clad Diameter, Connectorization, Core Diameter, Metalization, Numerical Aperture, Proof Test                                                                                                                                                    |
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