



HCS® 550 µm All Silica Low OH Step-Index Optical Fiber

P/N: CF01493-53

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

Product Specifications	
Product Description	550 All Silica Low OH Step-Index
Physical Characteristics	
Core Diameter	550 ± 12 µm
Cladding Diameter	600 ± 10 µm
Coating Diameter	630 ± 10 µm
Buffer Diameter	750 ± 30 µm
Core/Clad Offset	≤ 9 µm
Crimp & Cleave Compatible	No
Cladding Material	HCS fluoroacrylate
Buffer Material	ETFE
Standard Buffer Color	Natural
Optical Characteristics	
Type	Multimode Step-Index
Numerical Aperture	0.22
Attenuation @ 850 nm	≤ 8 dB/km
Water Content	Low OH
Mechanical and Environmental	
Operating Temperature	-65 to +125 °C
Short-Term Bend Radius	≥ 58 mm
Long-Term Bend Radius	≥ 94 mm
Proof Test Level	≥ 100 kpsi (0.689 GPa)
Order by Part Number	CF01493-53
Product Description Code	HCL-M0550T
OPTIONS	Buffer Color, Buffer Diameter, Buffer Material, Cabling, Clad Diameter, Connectorization, Core Diameter, Metalization, Numerical Aperture, Proof Test
Contact Information	For additional information please contact your sales representative. You can also visit our website at www.lightera.com or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website.
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