



HCS® 600 μm Low OH Optical Fiber

P/N: CF01493-14



Overview

HCS® (Hard-Clad Silica) is a polymer coated optical fiber system invented by us in the early years of the optical fiber industry. A proprietary polymer is applied to the pristine surface of pure, fused silica as we draw the glass down to its final, step-index, multimode optical fiber form. We then add additional buffer layers to improve chemical and abrasion resistance. This final step increases the finished diameter to a dimension that is easier for field-technicians to handle.

HCS is optimized for use at the 650 and 850 nm wavelengths which are common in transceivers deployed in many industrial applications. The pure silica core is highly transparent. This makes HCS fiber suitable for use over a very broad range of optical wavelengths and in a variety of applications beyond data communications such as fiber optic sensors, spectroscopy and laser delivery.

HCS optical fiber characteristics:

- High mechanical strength
- Bend insensitivity
- Crimp-on connector capability similar to electrical wires (for HCS core sizes up to 400 μm)
- Resistance to harsh chemicals commonly found in industry
- Wide operating temperature range
- Superior crush, twist and flex performance
- Long term reliability
- Ease of handling

HCS fibers have a high core-to-clad ratio. By using a very thin cladding layer, light transmitting devices are connected to a large core area that efficiently couples more of the optical energy into and along the fiber. This enables systems designers to take advantage of lower cost transceivers and simplified connectors to minimize overall systems expense.

Typical Applications

High-Power Laser Delivery
Short-to-Medium Distance
Communications (Up to 3 km)
Avionics Communications
Medical Sensing
Factory Automation
Laser Therapy and Surgery
Near-IR Spectroscopy
Optical Pyrometry
Nuclear Plasma Diagnostics

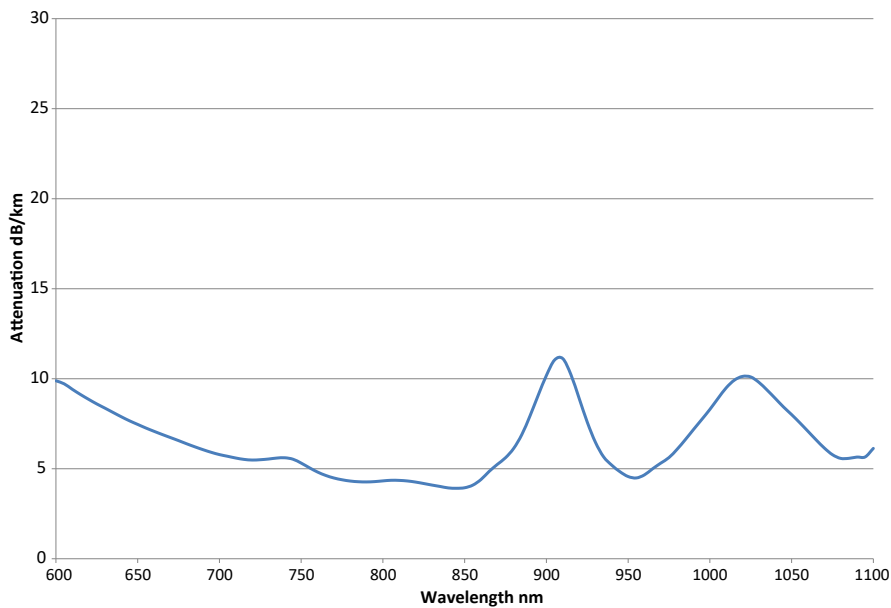


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Product Specifications			
Product Description		600 0.37 NA Low OH	
Physical Characteristics			
Core Diameter	600 ± 10 µm	Crimp & Cleave Compatible	Yes
HCS® Cladding Diameter	630 +5/-10 µm	Cladding Material	HCS fluoroacrylate
ETFE Buffer Diameter	1040 ± 30 µm	Buffer Material	ETFE
Core/Clad Offset	≤ 8.0 µm		
Optical Characteristics		Mechanical and Environmental	
Type	Multimode Step-Index	Operating Temperature	-65 to +125 °C
Numerical Aperture	0.37	Short-Term Bend Radius	≥ 44 mm
Attenuation @ 850 nm	≤ 8 dB/km	Long-Term Bend Radius	≥ 71 mm
Water Content	Low OH	Proof Test Level	≥ 100 kpsi (0.689 GPa)
Order by Part Number		CF01493-14	
Description Code		HCP-M0600T	
OPTIONS: Buffer Color, Buffer Diameter, Buffer Material, Proof Test			

Typical Spectral Attenuation CF01493-14



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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