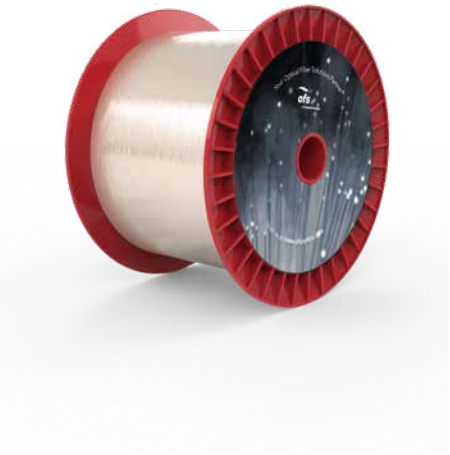
50 µm Graded-Index OM2 Bend - Insensitive MM Optical Fiber

The Reliable Solution for Low-Loss, High Bandwidth Applications



Features

- Superior geometric tolerances and very low attenuation
- D-LUX® Shield Coating for excellent fiber protection along with easy stripping
- Meets Telcordia GR-20-CORE and GR-409-CORE standards

Benefits

- Enables minimal connection loss and low cabled attenuation
- Low macrobend loss at bends down to 7.5 mm radius
- Ease of installation

Overview

OFS' 50 Micron (µm) Graded-Index OM2 Multimode Fiber is a Bend-Insensitive 50 µm fiber that provides significantly lower macrobend loss at bends down to 7.5 mm radius, compared to conventional 50/125 µm fiber. Robust and easy to connectorize, the fiber provides ease of installation even under the most stringent conditions.

In addition, OFS protects the fibers with our D-LUX® Shield Coating, a dual-layered acrylate coating system that provides the industry's best protection against water, temperature and humidity extremes, yet still strips cleanly and easily.

All OFS graded index multimode fibers are 100% quality tested and proven to exceed the Telecommunications Industry Association (TIA) Fiber Optic Test Procedures (FOTP) and other industry standards. In addition, OFS optical fiber meets the optical and mechanical requirements of Telcordia Generic Requirements documents GR-20-CORE and GR-409-CORE.

Applications

Premise general purpose applications

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.

Product Specifications		
Physical Characteristics		
Core Diameter	50 ± 2.5 µm	
Core Non-Circularity	≤ 5 %	
Clad Diameter	125 ± 0.8 µm	
Clad Non-Circularity	≤ 0.7%	
Core/Clad Concentricity Error (Offset)	≤ 1.0 µm	
Coating Diameter	242 ± 5 µm	
Coating Non-Circularity	≤ 5 %	
Coating-Clad Concentricity Error (Offset)	≤ 12 µm	
Tensile Proof Test	100 kpsi (0.69 GPa)	
Coating Strip Force		
Range	0.22 - 2.0 lbf (1.0 - 8.9 N)	
Typical	0.6 lbf (2.7 N)	
Standard Reel Lengths	2.2 – 17.6 km	
Optical Characteristics		
Attenuation		
at 850 nm	≤ 2.2 dB/km	
at 1300 nm	≤ 0.6 dB/km	
Overfilled Bandwidth		
at 850 nm	≥ 500 MHz-km	
at 1300 nm	≥ 500 MHz-km	
Attenuation at 1380 nm minus attenuation		
at 1300 nm	≤ 1.0 dB/km	
Attenuation Uniformity / Point Discontinuities		
at 850 nm and 1300 nm	≤ 0.08 dB	
Numerical Aperture	0.200 ± 0.010	
Chromatic Dispersion		
Zero Dispersion Wavelength(λ_0)	$1297 \le \lambda_0 \le 1328$ nm	
Zero Dispersion Slope (S_0)	$S_0 \le 4(-103)/(840(1-(\lambda_0/840)^4))$ ps/nm^2.km	
Group Refractive Index		
at 850 nm	1.483	
at 1300 nm	1.479	
Backscatter Coefficient		
at 850 nm	-68.4 dB	
at 1300 nm	-75.8 dB	
Macrobend Attenuation	850 nm	1300 nm
100 turns @ 37.5 mm radius	≤ 0.5 dB	≤ 0.5 dB
2 turns @ 15 mm radius	≤ 0.1 dB	≤ 0.3 dB
2 turns @ 7.5 mm radius	≤ 0.2 dB	≤ 0.5 dB
Environmental Characteristics		
Operating Temperature Range	-60 °C to +85 °C	
Temperature Induced Attenuation at 850 nm and 1300 nm from -60° C to +85° C (5 24-hour cycles)	≤ 0.1 dB/km	
Temperature and Humidity Induced Attenuation at 850 nm and 1300 nm from -10° C to +85° C, 94% RH (30 24-hour cycles)	≤ 0.1 dB/km	
Accelerated Aging (Temperature) Induced Attenuation at 85° C for 30 days	≤ 0.1 dB/km	
Water Immersion Induced Attenuation, 23° C for 30 days	≤ 0.1 dB/km	
Dynamic Fatigue Stress Corrosion Parameter (n^d)	≥ 20	

For a full list of our certifications, visit our website.

RoHS Compliant EU Directive 2002/95/EC

OFS Marketing Communications
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