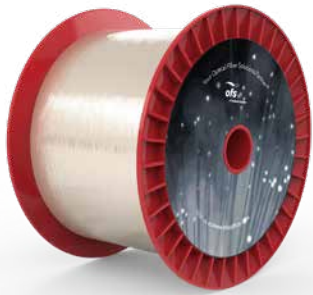




## 62.5 $\mu\text{m}$ Graded-Index Multimode Optical Fiber

The Reliable Solution for Low-loss, High Bandwidth Applications



### Product Description

In data communications where high reliability, high data capacity, and ease of connectivity are required, OFS multimode optical fibers have become the medium of choice. Among U.S. manufacturers, OFS offers the widest range of graded-index multimode fibers as standard selections.

Consistent product quality, on-time delivery, responsive service, and excellent technical support are just a few of the reasons why OFS is one of the world's leading producers of optical fiber.

OFS' graded-index multimode fibers are 100% quality tested in accordance with 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.

### Manufacturing and Quality Control

Robust and easy to connectorize, our Graded-Index 62.5  $\mu\text{m}$  Fiber promotes ease of installation even under the most stringent conditions.

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.

Our multimode optical fiber is manufactured at OFS' Multimode Center of Excellence in Sturbridge, Massachusetts, using the company's advanced Modified Chemical Vapor Deposition (MCVD) technology. Using this process, OFS produces a range of multimode fiber products that offer excellent performance for all transmission protocols. The MCVD method enables OFS to precisely control each fiber's index of refraction. Under the restricted launch conditions used in Gigabit Ethernet, this maximizes fiber bandwidth performance at 1 Gb/s speeds.

Like all of OFS's graded-index multimode fibers, OFS Graded-Index 62.5  $\mu\text{m}$  Fiber is tested and proven to exceed the Telecommunications Industry Association (TIA) Fiber Optic Test Procedures (FOTP) and other industry standards.

### D-Lux® Shield Coating

OFS multimode fibers are made with a world-class draw process and our enhanced D-LUX Shield coating, designed to minimize induced attenuation that can occur in tight-buffer cable. Easy to strip and install, the coating offers outstanding performance in attenuation-sensitive 1 Gb/s and 10 Gb/s systems.

For additional information please contact your sales representative.

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

## 62.5 μm Graded-Index Multimode Optical Fiber

| Product Specifications   | 62.5 μm Graded-Index MM Fiber  |
|--|--|
| <b>Physical Characteristics</b>  | <b>62.5/125</b>  |
| Core Diameter  | 62.5 ± 2.5 μm  |
| Core Non-Circularity   | ≤ 5 %  |
| Clad Diameter  | 125 ± 1 μm   |
| Clad Non-Circularity   | ≤ 1 %  |
| Core/Clad Concentricity Error (Offset)   | ≤ 1.0 μm   |
| Coating Diameter   | 245 ± 10 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)<br>Typical: 0.6 lbf (2.7 N)  |
| Standard Reel Lengths  | 2.2 - 8.8 km   |
| <b>Optical Characteristics</b>   |  |
| Attenuation @ 850 nm<br>@ 1300 nm  | ≤ 2.9 dB/km<br>≤ 0.6 dB/km   |
| Overfilled Bandwidth @ 850 nm<br>@ 1300 nm   | ≥ 200 MHz-km<br>≥ 500 MHz-km   |
| Attenuation @ 1380 nm minus attenuation<br>@ 1300nm  | ≤ 1.0 dB/km  |
| Attenuation Uniformity / Point Discontinuities<br>@ 850 nm and 1300 nm   | ≤ 0.08 dB  |
| Numerical Aperture   | 0.275 ± 0.015  |
| Chromatic Dispersion:<br>Zero Dispersion Wavelength ( $\lambda_0$ )  | 1320 - 1365 nm   |
| Zero Dispersion Slope ( $S_0$ )  | ≤ 0.11 ps/nm <sup>2</sup> -km<br>(1320 ≤ $\lambda_0$ ≤ 1348 nm)<br>≤ 0.001 x (1458 - $\lambda_0$ )<br>(1348 ≤ $\lambda_0$ ≤ 1365 nm) |
| Group Refractive Index<br>@ 850 nm<br>@ 1300 nm  | 1.496<br>1.491   |
| Backscatter Coefficient<br>@ 850 nm<br>@ 1300 nm   | -68.4 dB<br>-72.1 dB   |
| Macrobend Attenuation<br>100 turns on a 75 mm mandrel @ 850 nm<br>and 1300 nm  | ≤ 0.5 dB   |
| <b>Environmental Characteristics</b>   |  |
| Operating Temperature Range  | -60 °C to +85 °C   |
| Temperature Induced Attenuation at 850 nm and<br>1300 nm from -60 °C to +85 °C (5 24-hour cycles)                          | ≤ 0.1 dB/km  |
| Temperature and Humidity Induced Attenuation at<br>850 nm and 1300 nm from -10 °C to +85 °C 94% RH,<br>(30 24-hour cycles) | ≤ 0.1 dB/km  |
| Accelerated Aging (Temperature)<br>Induced Attenuation at 85 °C for 30 days  | ≤ 0.1 dB/km  |
| Water Immersion Induced Attenuation,<br>23 °C for 30 days  | ≤ 0.1 dB/km  |
| Dynamic Fatigue Stress Corrosion Parameter ( $n_d$ )   | ≥ 18   |



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SOLUTIONS

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