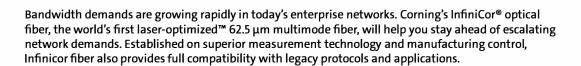
# Corning<sup>®</sup> InfiniCor<sup>®</sup> 300 Optical Fiber

## Product Information

## CORNING



#### **Standards Compliance\***

ISO/IEC 11801	Type OM1 fiber	
IEC 60793-2-10	Type A1-OM1 fiber	
TIA/EIA	492AAAA-A	

\*Meets or exceeds standards requirements for the fiber specifications listed.

## **Optical Specifications**

#### Bandwidth

Overfilled Modal Bandwidth* (MHz•km)	
850 nm	1300 nm
200	500

\*OFL BW, per TIA/EIA 455-204 and IEC 60793-1-41.

#### **Numerical Aperture**

0.275 ± 0.015

### **Dimensional Specifications**

#### **Glass Geometry**

Core Diameter	62.5 ± 2.5 μm
Cladding Diameter	125.0 ± 2.0 μm
Core-Clad Concentricity	≤ 1.5 μm
Cladding Non-Circularity	≤ 1.0%
Core Non-Circularity	≤ 5%

#### **Optimized Data Rate over Distance**

1 GB/s over 300 m	1 GB/s over 550 m
at 850 nm	at 1300 nm

Attenuation	
Wavelength (nm)	Maximum Value (dB/km)
850	≤ 2.9
1300	< 0.6

No point discontinuity greater than 0.2 dB. Attenuation at 1380 nm does not exceed the attenuation at 1300 nm by more than 1.0 dB/km.

Induced attenuation from 100 turns around a 75 mm mandrel shall be  $\leq$  0.5 dB at 850 nm and 1300 nm.

#### **Coating Geometry**

Coating Diameter	242 ± 5 μm
Coating-Cladding Concentricity	< 12 μm



## **Environmental Specifications**

Environmental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)
Temperature Dependence	-60°C to +85°C*	≤ 0.10
Temperature Humidity Cycling	-10°C to +85°C and up to 98% RH	≤ 0.10
Water Immersion	23°C ± 2°C	≤ 0.20
Heat Aging	85°C ± 2°C	≤ 0.20
Damp Heat	85°C at 85% RH	≤ 0.20

Operating Temperature Range: -60°C to +85°C \*Reference temperature = +23°C

## **Mechanical Specifications**

#### Proof Test

The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.69 GPa). Higher proof test levels are available.

#### Length

Fiber lengths available up to 17.6 km/spool.

## **Performance Characterizations**

Characterized parameters are typical values.

Refractive Index Difference	2%
Effective Group Index of Refraction $(n_{eff})^*$	850 nm: 1.496 1300 nm: 1.491
*n <sub>eff</sub> was empirically derived to the third decimal place using a specific commercially available OTDR.	
Fatigue Resistance Parameter (n <sub>d</sub> )	20
Coating Strip Force	Dry: 0.6 lbs. (2.7 N) Wet: 14 days in 23°C water soak: 0.6 lbs. (2.7 N)
Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)	850 nm: -68 dB 1300 nm: -76 dB
Chromatic Dispersion Zero Dispersion Wavelength (λ <sub>o</sub> ): Zero Dispersion Slope (S <sub>o</sub> ):	1332 nm ≤ λ <sub>o</sub> ≤ 1354 nm ≤ 0.097 ps/(nm²•km)
Spectral Attenuation (Typical Fiber)	4.0 3.5 3.0 2.0 1.5 0.0 800 1000 1200 1400 1600

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