

## 50/125/250µm Multimode Optical Fiber

### Product Information

Issue Date: 2004/10/11

This specification conforms to the requirement of IEC 60793 A1a, IEC 11801OM2 and ITU-T G.651.

### SPECIAL FEATURES FOR RIBBON CABLE APPLICATIONS

Cladding diameter, coating diameter and clad/coat concentricity error are specifically matched for ribbon cable.  
Fiber curls > 4m to ensure mass fusion splicing for ribbon cable.

<b>Characteristics</b>	<b>Conditions</b>	<b>Specified Values</b>	<b>Unit</b>
<b>OPTICAL CHARACTERISTICS</b>			
Attenuation Coefficient	850 nm	≤ 2.7	[dB/km]
	1300 nm	≤ 0.8	[dB/km]
Numerical Aperture		0.200 ± 0.015	
Bandwidth (*Higher bandwidth available upon request)	850 nm	≥ 500	[MHz·km]
	1300 nm	≥ 500	[MHz·km]
<b>BACKSCATTER CHARACTERISTICS</b>			
Attenuation Directional Uniformity		≤ 0.05	[dB/km]
Attenuation Uniformity		≤ 0.05	[dB]
Group Index of Refraction	850 nm	1.481	
	1300 nm	1.476	
<b>PHYSICAL CHARACTERISTICS</b>			
Core Diameter		50 ± 3	[µm]
Core Non-circularity		≤ 5	[%]
Core / Cladding Concentricity Error		≤ 3	[µm]
Cladding Diameter		125 ± 1	[µm]
Cladding Non-Circularity		≤ 2	[%]
Coating Diameter		245 ± 10	[µm]
Clad/Coat Concentricity Error		≤ 6	[µm]
Fiber curl		≥ 4	[m]
Proof Test		100	[kpsi]
Bend Induced Attenuation at 1300 nm (100 turns around a mandrel of 75 mm diameter)		≤ 0.5	[dB]
Coating Strip Force (Typical)		130	[g]
Length (Typical)		4.4 ~ 8.8	[km]
<b>ENVIRONMENTAL CHARACTERISTICS</b>			
Temperature Dependence at 850 nm and 1300 nm Induced Attenuation — 60°C to +85°C		≤ 0.2	[dB/km]
Watersoak Dependence at 850 nm and 1300 nm Induced Attenuation at 20°C for 30 days		≤ 0.2	[dB/km]
Damp Heat Dependence at 850 nm and 1300 nm Induced Attenuation at 85°C, 85%R.H., 30 days		≤ 0.2	[dB/km]

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