

## 50/125/500µm Multimode Optical Fiber

### Product Information

Issue Date: 2004/5/25

This specification conforms to the requirement of IEC 11801 OM1 and ITU-T G.651.

#### OPTICAL CHARACTERISTICS

<i>Characteristics</i>	<i>Conditions</i>	<i>Specified Values</i>	<i>Unit</i>
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	≥ 200	[ MHz·km ]
	1300 nm	≥ 500	[ MHz·km ]

#### BACKSCATTER CHARACTERISTICS

Attenuation Directional Uniformity		≤ 0.05	[ dB/km ]
Attenuation Uniformity		≤ 0.05	[ dB ]
Group Index of Refraction	850 nm	1.481	
	1300 nm	1.476	

#### PHYSICAL CHARACTERISTICS

Core Diameter		50.0 ± 3.0	[ µm ]
Core Non- circularity		≤ 5	[ % ]
Core / Cladding Concentricity Error		≤ 3.0	[ µm ]
Cladding Diameter		125 ± 1	[ µm ]
Cladding Non-Circularity		≤ 2.0	[ % ]
Coating Diameter		495 ± 15	[ µm ]
Clad/Coat Concentricity Error		≤ 12	[ µm ]
Fiber curl		≥ 2	[ 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	[ km ]

#### ENVIRONMENTAL CHARACTERISTICS

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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