50/125/250μm PrimeLaser™ 150 Fiber

Product Information

Issue Date: 2004/5/25

This specification conforms to the requirement of IEC 60793 A1a, IEC 11801OM3 and ITU-T G.651.
OM3-type 850 nm Laser-Optimized 50 μm Multimode Fiber for Applications of 1.25 Gb/s over 1.2 Km (or less) or 10 Gb/s over 150 m (or less)

OPTICAL CHARACTERISTICS

Characteristics	*Conditions*	*Specified Values*	*Unit*
Attenuation Coefficient	850 nm	≦ 2.5	〔dB/km〕
	1300 nm	≦ 0.7	〔dB/km〕
Numerical Aperture		0.200 ± 0.015	
Overfilled Modal Bandwidth	850 nm	≧ 750	〔MHz·km〕
	1300 nm	≧ 500	〔MHz·km〕
Differential Mode Delay(Radius 0 to 23 μm)	850 nm	≦ 0.66	〔ps/m〕

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 ± 2.5	〔μm〕
Core Non- circularity	≦ 5	〔%〕
Core / Cladding Concentricity Error	≦ 1.5	〔μm〕
Cladding Diameter	125 ± 1	〔μm〕
Cladding Non-Circularity	≦ 1.0	〔%〕
Coating Diameter	245 ± 10	〔μm〕
Coating Non-Circularity	≦ 6	〔%〕
Clad/Coat Concentricity Error	≦ 5	〔μm〕
Fiber curl	≧ 4	〔m〕
Proof Test	100	〔kksi〕
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〕

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence at 850 nm and 1300 nm Induced Attenuation – 60°C to +85°C	≦ 0.1	〔dB/km〕
Temperature And Humidity Cycling at 850 nm and 1300 nm Induced Attenuation – 10°C to +85°C, 90%R.H	≦ 0.2	〔dB/km〕
Watersoak Dependence at 850 nm and 1300 nm Induced Attenuation at 23°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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SYSTEM CERTIFICATION ISO 9001:2000 SGS