

FNT300-2650085B

Polyimide Coated Bend-insensitive Multimode Fiber

Bend-insensitive graded-index Multimode fiber with the following properties¹:

1. Geometrical features

Core Profile	Ge-doped fused silica, graded-index
Cladding Ø	125 µm ± 2µm
Core Ø	50 µm ± 2.5 µm
Core/Clad Concentricity Error	≤ 1.5 µm
Cladding Non-circularity	≤ 2.0%
Coating Ø	160 µm ± 10µm
Coating/ Clad Concentricity Error	≤ 5µm
Coating Material	Polyimide

2. Optical properties

Bandwidth (OFL) @ 850nm	>500 MHz.km
Bandwidth (OFL) @ 1300nm	>500 MHz.km
Attenuation @ 850 nm	< 2.6 dB/km
Attenuation @ 1300 nm	< 0.8 dB/km
Attenuation @ 1550nm	< 0.5 dB/km
Numerical Aperture	0.200 ± 0.015
Macrobend Loss @ 850nm	
2 turns, 15 mm radius	≤ 0.1 dB
2 turns, 7.5 mm radius	≤ 0.2 dB

3. Mechanical properties

Proof-test (100 %)	≥ 100 kpsi
Dynamic Tensile Strength Unaged Fiber (0.5m), Median Tensile Strength	≥ 3.8 GPa
Dynamic Fatigue Stress Corrosion Parameter nd (typical)	≥ 23

3. Additional features

Operating Temperature	- 190°C to + 385°C
Fiber color	Yellow gold

4. Delivery length

>100m

¹This product under development and classified as a B-sample: For trial of total functional range and the technical requirements, usable for continuous-operating tests, manufacturing of the product is for creation of a specification for the series production and verification of manufacturability. First application tests, dimensions and key parameters according to the series. Not for serial application. Not all customer specifications necessarily fulfilled.