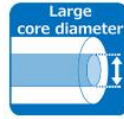




G.654.D

Z-PLUS Fiber™ 150

Advanced Pure Silica Core Single Mode Optical Fiber



- **World's lowest attenuation of 0.144 dB/km or 0.150 dB/km, and very large effective area of 150 μm² typical**
- **For transoceanic (6,000 – 12,000 km) systems**

General

Effective Area

Typical effective area at 1550 nm 150 μm²

Attenuation

Typical attenuation at 1550 nm LL: 0.150 dB/km
 ULL: 0.144 dB/km

Core Glass

Pure Silica

Optical Characteristics

Attenuation

Attenuation at 1550 nm LL: 0.150 ± 0.003 dB/km
 (Average in total quantity)
 ULL: 0.144 ± 0.003 dB/km

Point discontinuity at 1550 nm ≤ 0.05 dB

Effective Area

Effective area at 1550 nm 150 ± 15 μm²

Chromatic Dispersion

Chromatic dispersion at 1550nm ≤ 23 ps/nm/km
 Chromatic dispersion slope at 1550nm ≤ 0.070 ps/nm²/km

Cable Cutoff Wavelength (λ_{cc})

λ_{cc} ≤ 1530 nm

Polarization Mode Dispersion (PMD)

Individual fiber PMD*¹⁾ ≤ 0.1 ps/r-km

*1) Measured on fiber with free tension. PMD values may change when fiber is cabled. This PMD value will be achieved when cabled properly.

This document states a standard specification. Upon request, alternative value offerings will be available.

Geometrical Characteristics

Glass Geometry

Core - cladding concentricity error ≤ 0.8 μm
 Cladding diameter 125.0 ± 1.0 μm
 Cladding non-circularity ≤ 2.0 %

Coating Geometry

Coating diameter (Natural) 245 ± 10 μm
 Coating diameter (Colored) 250 ± 15 μm
 Coating-cladding concentricity error ≤ 12 μm

Mechanical Characteristics

Proof Test

Proof stress level 2.0%
 (200 kpsi = 1.43 GPa)

Macrobending Loss

Bending radius	Number of turns	Wavelength	Induced Attenuation
30 mm	100	1550 nm	≤ 2.0 dB
30 mm	100	1625 nm	≤ 2.0 dB

Packaging

Delivery Length

5 – 100 km