SUMITOMO ELECTRIC
Connect with Innovation

G.652.D

PureBand™ Submarine

Low Water Peak and Low Attenuation Single-Mode Optical Fiber

- **Low attenuation of 0.174 dB/km typical**
- **Compatible with standard G.652.D SMFs**
- **For cost effective regional repeatered and unrepeated submarine systems**

General

Effective Area

Typical effective area at 1550 nm	81 μm^2
Typical attenuation at 1550 nm	0.174 dB/km

Core Glass

GeO_2-doped Silica

Optical Characteristics

Attenuation

Attenuation at 1550 nm (Average in total quantity)	≤ 0.177 dB/km
Point discontinuity at 1550 nm	≤ 0.05 dB

Mode Field Diameter (MFD)

MFD at 1550 nm	10.3 ± 0.5 μm

Chromatic Dispersion

Chromatic dispersion at 1550 nm	≤ 18.0 ps/nm/km
Chromatic dispersion slope at 1550 nm	≤ 0.070 $ps/nm^2/km$

Cable Cutoff Wavelength (λcc)

λcc	≤ 1260 nm

Polarization Mode Dispersion (PMD)

Individual fiber PMD*1)	≤ 0.1 ps/r-km

Geometrical Characteristics

Glass Geometry

Core - cladding concentricity error	≤ 0.5 μm
Cladding diameter	125.0 ± 0.5 μm
Cladding non-circularity	≤ 0.5 %

Coating Geometry

Coating diameter (Natural)	245 ± 5 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	≤ 0.1 dB
30 mm	100	1625 nm	≤ 0.1 dB

Packaging

Delivery Length

5 – 100 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.

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