

GGPR15 High Bending Strength Fiber

Product Information

* U.S. Pat No (s). Re 36,146. Licenses granted by 3M IPC

Issue Date: 2008/10

Product Name: GGPR15

FEATURES

- Based on 3M Licensed High Strength GGP fiber technology, an additional five micron permanent protective coating on the glass cladding makes it the most robust fiber in the telecommunication industry
- Optical performance fully compliant to standard ITU-T G.652D Low water peak single mode fiber
- Macrobending loss performance compliant to ITU-T G.657 Class A single mode fiber
- Small bending (2R=3~10 mm) fatigue lifetime is 100~100.000 times longer than all standard single mode fiber

APPLICATIONS

- FTTH installation, Indoor cable, Drop/Distribution cable, can be used with mechanical splicer
- Low bending loss patch cords with SC, FC, LC type connectors

Characteristics

OPTICAL CHARACTERISTICS

Characteristics	Conditions	Specified Values	Unit
Attenuation Coefficient	1310 nm	≤ 0.35	[dB/km]
	1385 nm H2 aged*	≤ 0.31	[dB/km]
	1550 nm	≤ 0.21	[dB/km]
	1625 nm	≤ 0.23	[dB/km]
Mode Field Diameter	1310 nm	8.6 ± 0.4	[μm]
	1550 nm	9.7 ± 0.5	[μm]
Fiber Cut-Off Wavelength		< 1330	[nm]
Cable Fiber Cut-Off Wavelength		≤ 1260	[nm]
Zero Dispersion Wavelength		1300~1324	[nm]
Zero Dispersion Slope		≤ 0.092	[ps/(nm ² ·km)]
Dispersion Coefficient	1285 – 1330 nm	≤ 3.1	[ps/(nm·km)]
	1550 nm	≤ 18	[ps/(nm·km)]

*Hydrogen aging pre IEC60793-2-50 type B.1.3

BACKSCATTER CHARACTERISTICS

Attenuation Directional Uniformity		≤ 0.03	[dB/km]
Attenuation Uniformity		≤ 0.05	[dB]
Group Index of Refraction	1310 nm	1.467	
	1550 nm	1.468	

PHYSICAL CHARACTERISTICS

Glass Cladding Diameter		115 ± 1	[μm]
P-coat Diameter		125 ± 0.7	[μm]
P-coat Non-Circularity		≤ 1.0	[%]
Core/P-coat Concentricity Error		≤ 0.5	[μm]
Acrylate Coating Diameter		245 ± 10	[μm]
Coating Concentricity Error		≤ 6	[μm]
Fiber curl		≤ 2	[m]
Proof Test (Screen level)		1.72 (250)	[Gpa] [Kpsi]
Macrobending loss at 1550 nm/1625nm(1 turn, 10 mm radius) (10 turns around a mandrel of 15 mm radius)		≤ 0.3/1.0	[dB]
		≤ 0.03/0.2	[dB]
Acrylate Coating Strip Force, Average / Peak		≥ 105 / 140	[g]
Dynamic Fatigue(n _d)	23°C, 41%RH	> 30	
Length (Typical)		2.2~25.2	[Km]

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence at 1310 nm and 1550 nm Induced Attenuation – 60°C to +85°C		≤ 0.05	[dB/km]
Damp Heat Dependence at 1310 nm and 1550 nm Induced Attenuation at 85oC, 85%R.H., 30 days		≤ 0.05	[dB/km]
Watersoak Dependence at 1310 nm and 1550 nm Induced Attenuation at 20°C,30 days		≤ 0.05	[dB/km]

Prime Optical Fiber Corporation
 No.11, Ke Jung Rd. Science-Based Industrial Park
 Chu-Nan, 350, Miao-Li County, Taiwan, R.O.C.
 Tel: 886-37-586999 Fax: 886-37-586899
 E-mail: sales@pofc.com

