

Dispersion Shifted Fiber

Product Information

Issue Date: 2004/5/25

This specification conforms to the requirement of IEC 60793 B2 and ITU-T G.653.

FEATURES

- Low dispersion and attenuation at 1550nm
- Triangular pedestal index profile
- Mechanically strippable acrylate coating with a 245 μm nominal outside diameter
- Primarily used in loose tube and slotted core cable designs
- Optimum for use in optical amplifier systems

<i>Characteristics</i>	<i>Conditions</i>	<i>Specified Values</i>	<i>Unit</i>
OPTICAL CHARACTERISTICS			
Attenuation Coefficient	1310 nm	≤ 0.5	[dB/km]
	1550 nm	≤ 0.25	[dB/km]
Mode Field Diameter	1550 nm	7.4 ~ 9.0	[μm]
Fiber Cut-Off Wavelength		< 1500	[nm]
Cable Cut-Off Wavelength		< 1500	[nm]
Zero Dispersion Wavelength		1525 ~ 1575	[nm]
Zero Dispersion Slope		≤ 0.085	[ps/(nm ² ·km)]
Dispersion Coefficient	1525 – 1575 nm	≤ 3.5	[ps/(nm·km)]
PMD		≤ 0.2	[ps/ $\sqrt{\text{km}}$]
BACKSCATTER CHARACTERISTICS			
Attenuation Directional Uniformity		≤ 0.03	[dB/km]
Attenuation Uniformity		≤ 0.05	[dB]
Reflections		Not Allowed	
Group Index of Refraction	1310 nm	1.4738	
	1550 nm	1.4732	
PHYSICAL CHARACTERISTICS			
Core / Cladding Concentricity Error		≤ 0.8	[μm]
Cladding Diameter		125 \pm 1	[μm]
Cladding Non-Circularity		≤ 2.0	[%]
Coating Diameter (UV Curable Acrylate)		245 \pm 10	[μm]
Clad/Coat Concentricity Error		≤ 10	[μm]
Fiber curl		≥ 2	[m]
Proof Test		100	[kpsi]
Bend Induced Attenuation at 1550 nm (100 turns around a mandrel of 60 mm diameter)		≤ 0.1	[dB]
Fatigue Resistance Parameter (nd)		20	
Average Coating Strip Force / Peak Coating Strip Force Length (Typical)		$\geq 105 / 140$ (1.4) 12.6 ~ 25.2	[g] / (N) [km]
ENVIRONMENTAL CHARACTERISTICS			
Temperature Dependence at 1310 nm and 1550 nm Induced Attenuation – 60°C to +85°C		≤ 0.05	[dB/km]
Watersoak Dependence at 1310 nm and 1550 nm Induced Attenuation at 20°C for 30 days		≤ 0.05	[dB/km]
Damp Heat Dependence at 1310 nm and 1550 nm Induced Attenuation at 85°C, 85%R.H., 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

