

EasyBand® Plus-Mini 200µm Reduced Diameter Bending Insensitive Single-mode Fibre

Yangtze Optical Fibre and Cable Joint Stock Limited Company

YOFC EasyBand® Plus-Mini fibre realized reduced fibre outer diameter with excellent bending performance thanks to its bending insensitive fibre design.

YOFC EasyBand® Plus-Mini fibre keeps the same glass part size as standard 245µm fibre (bare glass part diameter is still 125µm) and has the same MFD, cutoff and other optical parameters as 245µm fibre such as EasyBand® Plus (YOFC 's G.657.A2 fibre), and it inherits almost all the advantages of EasyBand® Plus standard 245µm diameter G.657.A2 fibre.

Applications

- All types of fibre cables with different structures
- High performance optical network operating in O-E-S-C-L band
- High speed optical routes for Fibre-to-the-Home networks
- Cables with extreme low bending requirements
- Small-sized fibre cable and optical component

Norms

YOFC EasyBand® Plus-Mini fibre fully complies with ITU-T G.652.D/G.657.A1/G.657.A2/ G.657.B2 specifications. It is also comprehensively optimized for use in the whole telecom wavelength window (1260 nm-1625 nm).

Characteristics

- Reduced cable size and weight for micro cable
- More suitable for applications in downsized optical fibre devices
- Reduce network deployments cost and total cost of ownership
- Compatible with standard cleaving and stripping tools
- Similar settings of the fusion splice program with that of G.652 fibre
- All bands utilization, from O to L band and ready for future systems evolutions



Characteristics		Conditions	Specified values	Units
Optical Specifications				
Attenuation		1310nm	≤0.35	[dB/km]
		1383nm (after H ₂ aging)	≤0.35	[dB/km]
		1550nm	≤0.21	[dB/km]
		1625nm	≤0.23	[dB/km]
Attenuation vs. Wavelength Max. α difference		1285-1330nm, in reference to 1310nm	≤0.03	[dB/km]
		1525-1575nm, in reference to 1550nm	≤0.02	[dB/km]
		1460-1625nm, in reference to 1550nm	≤0.04	[dB/km]
Zero Dispersion Wavelength (λ ₀)		--	1300-1324	[nm]
Zero Dispersion slope (S ₀)		--	≤0.092	[ps/(nm ² ·km)]
PMD	Maximum Individual Fibre	--	≤0.2	[ps/√km]
	Link Design Value (M=20, Q=0.01%)	--	≤0.1	[ps/√km]
	Typical Value	--	0.04	[ps/√km]
Cable Cut-off Wavelength (λ _{cc})		--	≤1260	[nm]
Mode Field Diameter (MFD)		1310nm	8.4-9.2	[μm]
		1550nm	9.3-10.3	[μm]
Effective Group Index (N _{eff})		1310nm	1.466	--
		1550nm	1.467	--
Point Discontinuities		1310nm	≤0.05	[dB]
		1550nm	≤0.05	[dB]
Geometrical Specifications				
Cladding Diameter		--	125.0±0.7	[μm]
Cladding Non-Circularity		--	≤0.7	[%]
Coating Diameter		--	190-210	[μm]
Coating-Cladding Concentricity Error		--	≤10	[μm]
Coating Non-Circularity		--	≤6	[%]
Core-Cladding Concentricity Error		--	≤0.5	[μm]
Curl(radius)		--	≥4	[m]
Delivery Length		--	Up to 50.4	[km]
Environmental Specifications 1310nm, 1550nm & 1625nm				
Temperature Dependence Induced Attenuation		-60°C to +85°C	≤0.05	[dB/km]
Temperature-Humidity Cycling Induced Attenuation		-10°C to +85°C, 98% RH	≤0.05	[dB/km]
Watersoak Dependence Induced Attenuation		23°C, for 30 days	≤0.05	[dB/km]
Damp Heat Dependence Induced Attenuation		85°C and 85% RH, for 30 days	≤0.05	[dB/km]
Dry Heat Aging		85°C, for 30 days	≤0.05	[dB/km]
Mechanical Specifications				
Proof Test		--	≥9.0	[N]
		--	≥1.0	[%]
		--	≥100	[kpsi]
Macro-bend Induced Loss	10 Turn Around a Mandrel of 15 mm Radius	1550	≤0.03	[dB]
	10 Turn Around a Mandrel of 15 mm Radius	1625	≤0.1	[dB]
	1 Turn Around a Mandrel of 10 mm Radius	1550	≤0.1	[dB]
	1 Turn Around a Mandrel of 10 mm Radius	1625	≤0.2	[dB]
	1 Turn Around a Mandrel of 7.5 mm Radius	1550	≤0.5	[dB]
	1 Turn Around a Mandrel of 7.5 mm Radius	1625	≤1.0	[dB]
Dynamic Fatigue Parameter (n _f)		--	≥20	--