Large Core Multi-mode Optical Fibre (100/140 μm)

Description

YOFC 100/140 μm multimode fibre is a graded-index multi-mode optical fibre with a 100 μm core diameter and a 140 μm cladding diameter. The optical fibre is comprehensively optimized for performance at the 850 nm and 1300 nm operating wavelengths. The fibre has the highest bandwidth and lowest attenuation, which is satisfying the use at 850 nm and 1300 nm. YOFC 100/140 μm multimode fibre is designed and manufactured according to the most advanced level in the world.Due to low attenuation and high bandwidth, the fibre is specially suited for transmission in local networks.

The fibre has high NA and a large core. With high NA and large core, the fibre has higher coupling efficiency and can collect higher powers from sources than standard sing-mode or graded-index fibres.

Application

- Local-area network
- Industrial data communications
- CATV
- Optical device and connectors

Process

YOFC fibres are manufactured using the advanced Plasma activated Chemical Vapor Deposition (PCVD) process. Because of the inherent advantages of the process, YOFC fibres show extremely refined refractive index (RI) profile control, excellent geometrinl performance, low attenuation, etc.

Characteristics

- Efficient coupling to LED and laser sources
- High bandwidth and low attenuation at 850 nm and 1300 nm
- Dual UV-Cured Acrylate Coating offering good protection
- Excellent strippability

Customer variations

- Available in a range of NA, core size and index profile to meet customer requirement

Product code：4517WY
Issue date：01/2004
Supersedes：05/2003

YOFC

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Characteristics	Conditions	Specified Values				Units
Optical characteristics		**100/140-170**		**100/140-250**		
Numerical Aperture (calculated)		0.29±0.02		0.29±0.02		
Attenuation	850 nm	⩽5.0		⩽5.0		[dB/km]
	1300 nm	⩽3.0		⩽3.0		[dB/km]
Bandwidth	850 nm	⩾100		⩾100		[MHz · km]
	1300 nm	⩾100		⩾100		[MHz · km]
Index profile		Graded Index		Graded Index		
Geometrical characteristics						
Core diameter		100±4		100±4		[μm]
Cladding diameter		140±3		140±3		[μm]
Coating diameter		170±5		250±15		[μm]
Core non-circularity		⩽5.0		⩽5.0		[%]
Coating non-circularity		⩽2.0		⩽2.0		[%]
Coating/cladding concentricity error		⩽5.0		⩽5.0		[μm]
Mechanical characteristics						
Proof test	off line	>100		>100		[KPSI]
		>10.6		>10.6		[N]
Short-term bend radius		⩾11		⩾11		[mm]
Long-term bend radius		⩾19		⩾19		[mm]
Delivery length (km/reel)		⩾0.8	⩽4.4	⩾0.8	⩽4.4	[km]

Rmarks:
1. Other fibre lengths are available on request.
2. Other proof test is available.
3. Other jacket coating diameter is available.