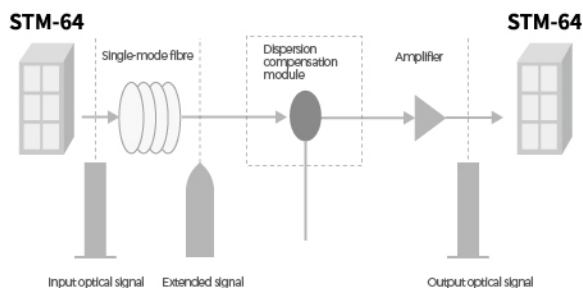


Dispersion Compensating Fibre

The YOFC dispersion compensation fibre (DCF) is manufactured using YOFC's proprietary plasma chemical vapor deposition (PCVD) process. Leveraging the PCVD process, which allows for precise control of the fibre preform profile, YOFC can accurately manufacture optical fibres with complex refractive index profile shapes, to obtain optimized products with the best compromise between insertion loss and residual dispersion over the compensated operating wavelength. Moreover, customized optical fibres with special center wavelength and dispersion are available.

Features

- Broad-band dispersion compensation and extremely low residual dispersion in the DWDM system
- 80%-120% slope compensation in C/L-band
- Low insertion loss and high negative dispersion coefficient
- High figure of merit (FOM)
- Low PMD
- Excellent splicing characteristics of new DCF



Optical fibre dispersion compensation module for SDH system

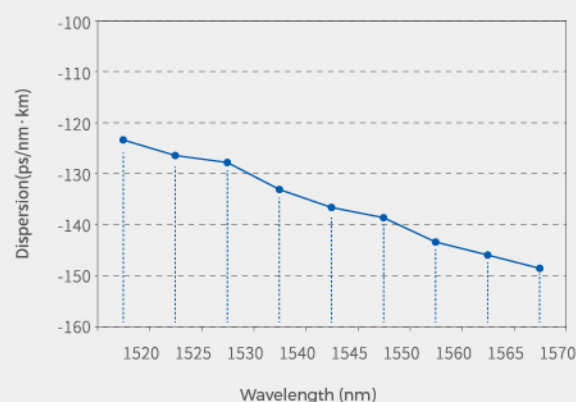
Applications

- G.652 standard single-mode fibre backbone and MAN communication systems
- DWDM transmission system
- SDH transmission system
- CATV
- Dispersion adjustment

Standard Products

- DCF for G.652C band (Part No.: DM1012-A)
- DCF for G.655C band (Part No.: DM1011-A)
- DCF for CATV and high FOM (Part No.: DM1013-A)

G.652 DCF dispersion curve



Specifications

Fibre type	TDCF-G.652C/170	BD NDCF-G.652C/250	BD SNDCF-G.652C/170	DCF-G.655C/250	SDCF-G.652C/170LD
Part No.	DM1010-D	DM1012-A	DM1012-D	DM1011-A	DM1013-A
Optical properties					
Operating wavelength (nm)	1525 ~ 1565	1525 ~ 1565	1525 ~ 1565	1525 ~ 1565	1525 ~ 1565
Attenuation at 1,525-1,565 nm (dB/km)	≤0.62	≤0.62	≤0.62	≤1.4	≤0.6
Dispersion coefficient at 1,545 nm (ps/nm·km)	-100 ~ -250	-100 ~ -200	-100 ~ -200	-160 ~ -360	≤-160
Relative dispersion slope at 1,545 nm (nm ⁻¹)	0.00309 ~ 0.00410	0.00309 ~ 0.00410	0.00309 ~ 0.00410	0.0176 ~ 0.0264	0.00309~0.00410
Geometrical properties					
Cladding diameter (μm)	87.0±4.0	120.0±10.0	120.0±10.0	110.0±10.0	120.0±10.0
Coating diameter (μm)	170.0±10.0	245.0±10.0	175.0±15.0	245.0±10.0	175.0±15.0
Cladding non-circularity (%)	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
Core/cladding concentricity error (μm)	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
Coating material	Dual-layer, UV-cured acrylate	Dual-layer, UV-cured acrylate	Dual-layer, UV-cured acrylate	Dual-layer, UV-cured acrylate	Dual-layer, UV-cured acrylate

- 010016 Version No. 202506