

Dispersion Management

In the applications of optical fibre communication and fibre laser, dispersion management is an important means to control optical parameters such as pulse and nonlinear. Taking advantage of PCVD and grating writing technology, YOFC can provide various dispersion management optical fibres, including dispersion displacement fibre, dispersion compensation l fibre, dispersion flat fibre, band-gap fibre, and chirped fibre grating, as well as corresponding components. Our outstanding winding and packaging technology ensures good practicability of the products.

Characteristics

- Low insertion loss
- Good wavelength consistency
- Low polarization mode dispersion
- Miniaturized design

Applications

- Telecommunication transmission system
- Data communication system
- CATV system
- Pulsed laser

Optical Performance

Parameter	ADCM-20	ADCM-40	ADCM-60	ADCM-80	ADCM-100	ADCM-120
Dispersion at 1545nm (ps/nm)	-340±10	-670±20	-1000±30	-1340±40	-1680±50	-2010±60
Relative dispersion slope at 1545nm (nm ⁻¹)	0.0036±10%					
Insertion Loss (dB)	≤2.8	≤4.2	≤5.5	≤6.8	≤8.0	≤9.1
Insertion Loss (Typical value)(dB)	2.5	3.8	5.1	6.3	7.4	8.4
Polarization mode dispersion (ps)	≤0.5	≤0.7	≤0.9	≤1.0	≤1.1	≤1.1
Polarization mode dispersion (Typical value)(ps)	0.2	0.3	0.4	0.5	0.6	0.7
Polarization-dependent loss(dB)	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1

- Note:** 1. The insertion loss is the maximum in the application band (1525nm-1565nm).
2. Polarization mode dispersion (PMD) is the average differential group delay measured by Jones matrix method in the band.
3. Other compensation length modules can be provided as required.

Nonlinear Characteristics

Parameter	Minimum value	Maximum value
Brillouin Scattering Domain Value (dBm)	6	-
Nonlinear Coefficient (n ² /A _{eff}) (W ⁻¹)	-	1.4×10 ⁻⁹
Effective Area (A _{eff})(μm ²)	20	-

Environmental Characteristics

Parameter	Minimum value	Maximum value
Usage Temperature Range (°C)	-5	70
Storage Temperature Range (°C)	-40	85
Environmental Reliability Testing	Conform to Telcordia GR-2854 and GR-1221 Standards	

Packaging Style

Packaging style	Size	Connector	Jumper
Standard (mm)	235×235×40	LC/UPC or Upon Request	Upon Request
Customization (mm)	Upon Request		