

Dispersion Compensating Fiber Module for NZDSF with a Large Effective Area



The Fujikura DCF Module can compensate signal distortion due to an accumulated dispersion through the fiber transmission and upgrade the line for over 10 Gb/s per one wavelength in D-WDM system.

Features

- ✧ Low loss
- ✧ High FOM (Figure of Merit)
- ✧ Broadband compensation
- ✧ Low PMD

Applications

- ✧ Long-haul telecommunication system based on Non-Zero dispersion Shifted Fibers(G.655)
- ✧ DWDM transmission system

Dispersion Compensation Fiber Module for NZDSF

| Parameter | Unit | Min. | Max |
|------------------------------|-----------|------|----------------------|
| Operating Wavelength | nm | 1525 | 1565 |
| Operating Temperature | degC | -5 | 70 |
| Storage Temperature | degC | -20 | 75 |
| SBS threshold | dBm | 3 | - |
| n_2/A_{eff} | 1/W | - | 2.6×10^{-9} |
| Fiber effective area @1550nm | μm^2 | 12 | - |

| Item | Unit | DC-HS-C-N180-UW | DC-HS-C-N360-UW | DC-HS-C-N540-UW |
|--|-----------|-----------------|-----------------|-----------------|
| NZDSF G.655 (Typical) | km | 40 | 80 | 120 |
| Dispersion @1550nm | ps/nm | -180+/-6 | -360+/-11 | -540+/-17 |
| Ratio of dispersion and dispersion slope @1550nm | nm^{-1} | 0.020+/-20% | | |
| Insertion Loss @1550nm | dB | ≤ 3.9 | ≤ 5.3 | ≤ 6.8 |
| PMD | ps | ≤ 0.5 | ≤ 0.7 | ≤ 0.8 |
| PMD(Typical) | ps | 0.2 | 0.3 | 0.4 |
| PDL | dBp-p | ≤ 0.1 | ≤ 0.1 | ≤ 0.1 |
| Connector type | - | As requested | | |
| Dimensions | mm | 224 x 238 x 45 | | |

Dispersion Compensation Fiber Module for NZDSF

| Parameter | Unit | Min. | Max |
|------------------------------|-----------|------|----------------------|
| Operating Wavelength | nm | 1565 | 1610 |
| Operating Temperature | degC | -5 | 70 |
| Storage Temperature | degC | -20 | 75 |
| SBS threshold | dBm | 3 | - |
| n_2/A_{eff} | 1/W | - | 2.3×10^{-9} |
| Fiber effective area @1590nm | μm^2 | 13 | - |

| Item | Unit | DC-HS-L-N320-UW | DC-HS-L-N640-UW | DC-HS-L-N960-UW |
|--|-----------|-----------------|-----------------|-----------------|
| NZDSF G.655 (Typical) | km | 40 | 80 | 120 |
| Dispersion @1590nm | ps/nm | -320+/-10 | -640+/-20 | -960+/-30 |
| Ratio of dispersion and dispersion slope @1590nm | nm^{-1} | 0.011+/-20% | | |
| Insertion Loss @1590nm | dB | ≤ 5.0 | ≤ 7.5 | ≤ 10.2 |
| PMD | ps | ≤ 0.6 | ≤ 0.8 | ≤ 0.9 |
| PMD(Typical) | ps | 0.3 | 0.4 | 0.5 |
| PDL | dBp-p | ≤ 0.1 | ≤ 0.1 | ≤ 0.1 |
| Connector type | - | As requested | | |
| Dimensions | mm | 224 x 238 x 45 | | |