

1 Product Description

Chromatic Dispersion optical compensation function with slope dispersion compensation for standard single-mode fiber (G.652) perform dispersion slope compensation in the C-band, allowing the system to optimize residual dispersion. In the dispersion compensation value of 1545nm wavelength dispersion can reach $-2070\text{ps} / \text{nm}$.

2 Applications

- G.652 standard single-mode fiber-optic long-haul and metro communications system
- DWDM transmission system
- SDH transmission systems
- CATV cable system
- Dispersion adjustment

3 Compliance

- Telcordia GR-1209-CORE-2001
- Telcordia GR-1221-CORE-1999
- RoHS

4 Product Features

- DWDM system dispersion compensation and broadband low residual dispersion
- G.652 fiber C-band 100% slope compensation (standard value)
- Low insertion loss
- Low polarization mode dispersion
- Performance indicators by Telcordia GR-2854-CORE standard certification
- Reliability by Telcordia GR-1221-CORE standard certification

5 Specifications

5.1 Linear parameters

Parameters	DCM-20	DCM-40	DCM-60	DCM-80	DCM-100	DCM-120
1545nm dispersion (ps/nm)	-340+/-10	-670+/-20	-1000+/-30	-1340+/-40	-1680+/-50	-2010+/-60
1545nm relative dispersion slope (nm ⁻¹)			0.00	36 +/- 10%		
Insertion Loss (dB)	≤3.3	≤4.7	≤6.4	≤8.0	≤8.0	≤8.0 (module type) ≤8.5(1U rack type)
Insertion Loss (typ) (dB)	2.7	4.0	5.4	6.7	8.0	8.0~8.5
Polarization mode dispersion (ps)	≤0.6	≤0.7	≤0.8	≤0.9	≤1.0	≤1.1
Polarization mode dispersion (typ) (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

Notes:

1) Application of the maximum insertion loss of the band (1525nm-1565nm) inside.

(2) for the mean difference clustering PMD delay in the band with Jones matrix

method of measurement.

(3) Other compensation lengths are available upon request.

5.2 Non-linear parameters

Parameters	MIN	MAX
Brillouin scattering threshold (dBm)	6	-
2 ⁻¹ Non-linear coefficient (n /Aeff) (W)	-	-9 1.4*10
2Effective area (Aeff)@1550nm (um)	20	-
Maximum input power (dBm)		23

5.3 Environmental parameters

Item	MIN	MAX
Operating temperature range	-5°C	70°C
Storage temperature range	-40°C	85°C
Relative humidity	<85%	
Environmental / reliability testing	Comply with Telcordia GR-2854 and GR-1221 standard	

6 Ordering information

Part Number	Product Description
S>DCM-19"-xx-2SU	Dispersion Compensation Module, 19" rack, xx km compensation, SC/UPC connectors
S>DCM-PL-xx-2SU	Dispersion Compensation Module, plastic box, xx km compensation, SC/UPC connectors

For detailed information please contact us by email: info@module-ltd.ru