

Dispersion Compensating Fiber (DK-SM*)



Description

The DK-SM dispersion compensating fiber has a high negative dispersion in the 1550 nm region. The fiber is designed for dispersion compensation of non-dispersion shifted fibers or for dispersion management in systems using TrueWave[®] non-zero dispersion shifted fiber.

Uses/Applications

- High bit rate digital systems
- Analog CATV applications
- WDM transmission systems
- Pulse shaping in ultra-short pulse sources.

Optical Specifications

Dispersion¹	≤ -80 ps/(nm·km)
Dispersion slope¹	≤ -0.15 ps/(nm ² ·km)
Attenuation¹	≤ 0.6 dB/km
Figure of Merit¹	≥ 150 ps/(nm·dB)
PMD¹	≤ 0.5 ps/√km
Cutoff wavelength	≤ 1300 nm
Mode field diameter^{1,2}	5.0 ± 0.5 μm
n_2/A_{eff}	$1.3 \cdot 10^{-9}$ W ⁻¹ (Typ.)

¹ at 1550 nm

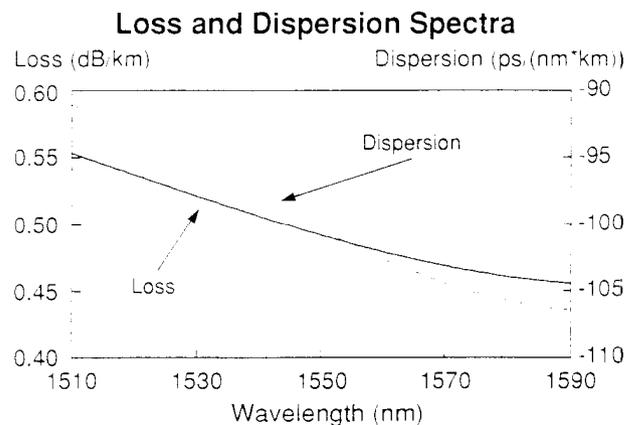
² Petermann II Def.

Ordering Information

All fibers will be delivered in spool lengths yielding the desired dispersion. Maximum length on a spool is 30 km. The DK-SM fiber can be supplied spliced to standard single mode or dispersion-shifted fibers. Please specify the desired dispersion and fiber comcode 107993289

Features

- High negative dispersion
- Second order compensation
- Low attenuation
- Low PMD
- Low splice loss



Physical Characteristics

Cladding Diameter	125 ± 1 μm
Coating Diameter	240 ± 10 μm
Core Eccentricity	< 1.0 μm
Cladding Non-Circularity	$< 2\%$
Proof Test	1%

For more information or for technical assistance, please contact the Specialty Fiber Devices group at:

	<u>U.S. location</u>	<u>Denmark location</u>
Phone:	1-800-364-6404	(+45) 4345 8888
Fax:	(908)582-2422	(+45) 4345 5373

* DK-SM Dispersion Compensating Fiber was formerly offered under the LYCOM brand name