

## **Dispersion Compensating Fiber**



## **Description**

Thorlabs' dispersion compensating bare fiber delivers high performance across a broad spectral range in the telecom region. These fibers have both high mechanical reliability and high optical stability. The DCF38 fiber has dispersion designed specifically to match and compensate Corning L1000 or SMF-28e+ fiber.

## **Specifications**

Dispersion Specifications	
Dispersion @ 1550 nm	-49.00 to -30.00 ps/nm*km
Dispersion Slope @ 1550 nm	-0.155 to -0.075 ps/nm <sup>2</sup> *km
Typical Effective Area	≥26.8 µm²
Polarization Mode Dispersion	≤0.05 ps/√km



General Specifications	
Mode Field Diameter @ 1550 nm	5.72 to 6.30 μm
Cladding Diameter	125.0 ± 1.0 μm
Coating Diameter	250 ± 5 μm
Coating-Cladding Concentricity	<12 μm
Core-Clad Concentricity	≤0.5 µm
Cutoff Wavelength	≤1520 nm
Attenuation @ 1550 nm	≤0.265 dB/km
Attenuation Slope from 1530 to 1565 nm	$-0.00040 \le \text{to} \le -0.00011 \text{ dB/nm*km}$
Point Discontinuity	≤0.10 dB @ 1550 nm
Optical Return Loss	≥60 dB
Typical Splice Loss @ 1550 nm (Splice DCF38/DCF38)	≤0.15 dB

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April 1, 2013 23057-S01, Rev B