



Doped Fiber

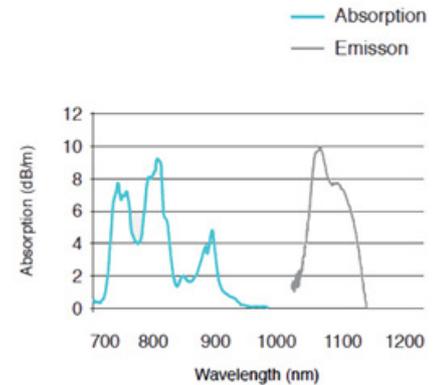
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Datasheet

ND Doped Fiber

ND Doped Fiber (DF1000) is a Single-Mode (SM) Neodymium doped laser fiber that can be used in conjunction with low-cost 780nm to 820nm laser diodes. Output emission may be length-tuned in the region of 1080nm to 1100nm.

Neodymium doped fiber was one of the very first rare-earth doped single-mode fibers produced by the ground-breaking work of the Southampton University Optical Fiber Group in the 1980s. Fibercore's DF1000 is the ideal introduction to fiber laser technology, with Neodymium doped fiber offering a very low lasing threshold, even when pumped with low-cost 'compact disk' type laser diodes.



Advantages:

- Low lasing threshold
- Low cost for pumping

Related Products:

- SM Fiber for Visible Through to Near IR (SM980(5.8/125))
- SM Ytterbium Doped Fiber (DF1100)

Typical applications:

- Fiber lasers
- Amplified Spontaneous Emission (ASE) light source
- Educational kits

Product Variant:

- **DF1000** Low power 1085nm laser fiber

Specifications

	DF1000
Operating Wavelength (nm)	1085
Cut-Off Wavelength (nm)	875 - 1025
Numerical Aperture	0.18 - 0.22
Mode Field Diameter (µm)	3.9 - 5.0 @1085nm
Absorption (dB/m)	4.5 dB/m (Nominal) @780nm 8.5 dB/m (Nominal) @810nm 3.5 dB/m (Nominal) @830nm
Attenuation (dB/km)	≤20 @1085nm
Proof test (%)	1 (100kpsi)
Cladding Diameter (µm)	125 ± 1
Core Concentricity (µm)	≤0.5
Coating Diameter (µm)	245 ± 15
Coating Type	Dual Acrylate

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