



Passive Cladding Pumped Fiber

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Datasheet

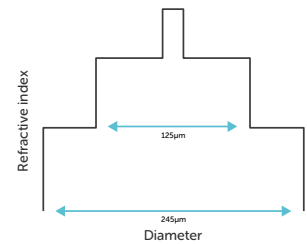
Low Index Double Clad Passive Fiber

Double clad passive fibers are available for 1060nm and 1550nm fiber laser, pump combiner, amplifier and sensor applications.

The DC1060(10/125)0.08HD fiber is available with a low numerical aperture of 0.08 and a 10µm core diameter to give significant benefits in power handling capabilities and high non-linear thresholds for 1060nm fiber laser applications.

The 1550nm DC1500(6/125)0.21HD and DC1500(11/125)0.12HD are optimized for splice compatibility to Fibercore's erbium/ytterbium doped amplifier fibers to allow superior efficiency high power amplifiers.

These fibers use a 245µm diameter low index polymer coating material that has been successfully qualified for mechanical reliability and attenuation against the Telcordia 85°C/85% humidity test.



Advantages:

- High power handling capability
- 1060nm and 1550nm variants
- Splice compatible with Fibercore doped fibers
- Range of core NAs available

Typical applications:

- High power amplifiers
- Fiber lasers
- LIDAR
- Biomedical probes
- Beam delivery
- Pump combiners

Product Variants:

- **DC1060(10/125)0.08HD** Double clad fiber with a 10µm core diameter and 0.08 NA for use around 1060nm
- **DC1500(11/125)0.12HD** Double clad fiber with an 11µm MFD and 0.12 NA for use around 1550nm
- **DC1500(6/125)0.21HD** Double clad fiber with a 6µm MFD and 0.21 NA for use around 1550nm



Specifications

	DC1060(10/125)0.08HD	DC1500(11/125)0.12HD	DC1500(6/125)0.21HD
Single-Mode Core			
Mode Field Diameter (µm)	11.0 @1060nm (nominal)	9.5 - 11.5 @1550nm	5.6 - 6.5 @1550nm
Core Numerical Aperture	0.07 - 0.09	0.11 - 0.13	0.20 - 0.22
Cut-Off Wavelength (nm)	960 - 1040	1360 - 1520	1290 - 1520
Core Attenuation (dB/km)	≤20 @1060nm	≤1 @1550nm	
Core Concentricity (µm)	≤0.5		
Core Size (µm)	9 - 11	9 (nominal)	5 (nominal)
Pump Guide			
Cladding Attenuation (dB/km)	≤15 @1095nm		
Cladding Numerical Aperture	0.45 (nominal)		
Cladding Diameter (µm)	125 ± 1		
General			
Operating Wavelength (nm)	1060	1550	
Coating Diameter (µm)	245 ± 7		
Proof Test (%)	1 (100 kpsi)		
Coating Material	Low index fluoroacrylate		
Operating Temperature (°C)	-55 to +85		