

# LMA-5

## Endlessly Single-Mode 5 $\mu$ m Core Fiber

- Low fiber loss
- Endlessly single-mode
- Radiation hard pure silica fiber
- Easy alignment

This single-mode fiber is optimized to exhibit low loss across the widest possible wavelength region from 400 nm to above 2000 nm while keeping an almost constant mode field diameter.

The fiber is endlessly single-mode (i.e. it has no higher order mode cut-off) and, therefore, delivers pristine mode quality at all wavelengths.

The fiber has a standard 125  $\mu$ m outer diameter and is compatible with all common fiber tools.

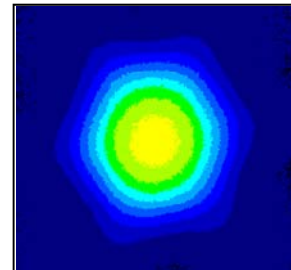
The fiber is available with hermetically sealed ends and FC/PC connectors. For a connectorized fiber, we can customize the amount of fiber end beam expansion.

This product is also available in a polarization-maintaining version as the LMA-PM-5.

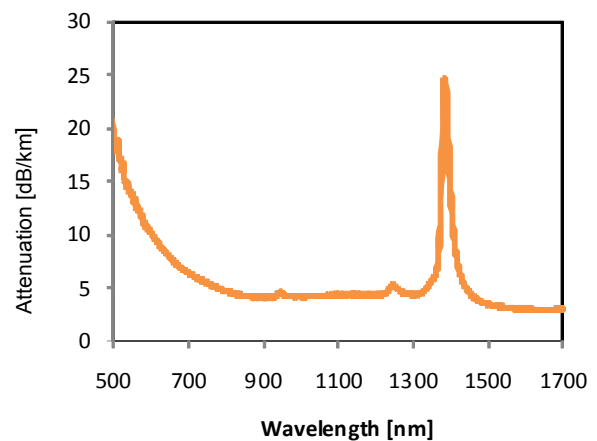
### Applications

- Single-mode high power delivery
- Mode filtering
- Single-mode pigtailling
- Short pulse delivery

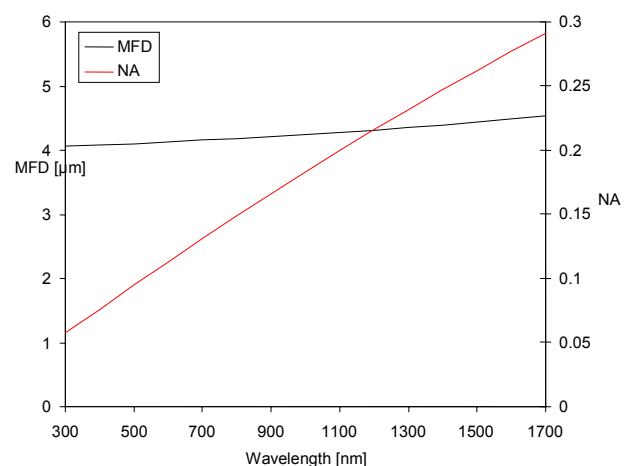
Physical properties	
Material	Pure silica
Cladding diameter	125 $\pm$ 2 $\mu$ m
Coating diameter	245 $\pm$ 10 $\mu$ m
Coating material	Acrylate
Core diameter	5 $\pm$ 0.5 $\mu$ m
Proof test level	>0.5 %
Optical properties	
Attenuation @ 800-1550 nm	< 5 dB/km
Mode field diameter	4.3 $\pm$ 0.5 $\mu$ m
NA @ 1060 nm (5%)	0.2 $\pm$ 0.02
NA @ 532 nm (5%)	0.1 $\pm$ 0.02



### Typical measured spectral attenuation



### MFD and NA



LMA-5-081010