

LMA-15

Endlessly single-mode 15 μm core fiber



- Strictly single-mode at all wavelengths
- Low fiber loss
- Radiation hard pure silica fiber
- Wavelength independent MFD
- Easy alignment
- Optional connectors and beam-expansion

This single-mode large mode area fiber combines a large effective mode field area (~ 125 μm²) and low loss to allow high power delivery without nonlinear effects or material damage.

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 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-15.

Applications

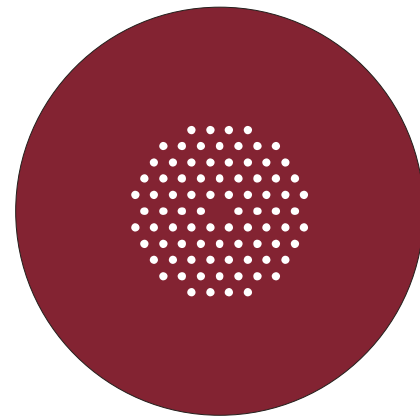
- Single-mode high power delivery
- Mode filtering
- Single-mode pigtailed
- Short pulse delivery

Physical properties

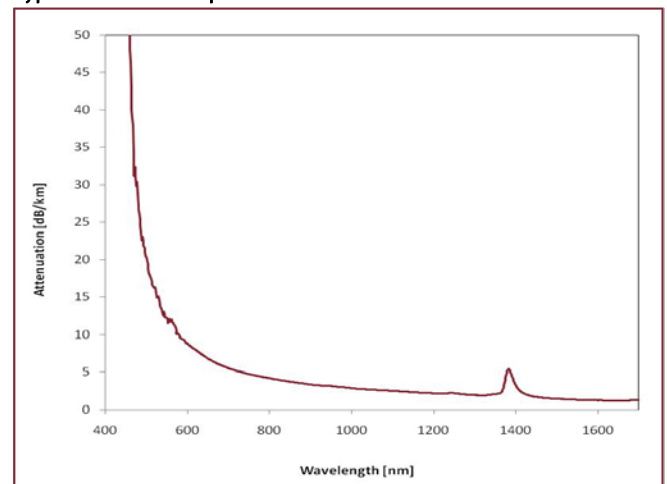
Signal core diameter	15 ± 0.5 μm
Outer cladding diameter, OD	230 ± 5 μm
Coating diameter	350 ± 10 μm
Core and cladding material	Pure silica
Coating material, single layer	Acrylate

Optical properties

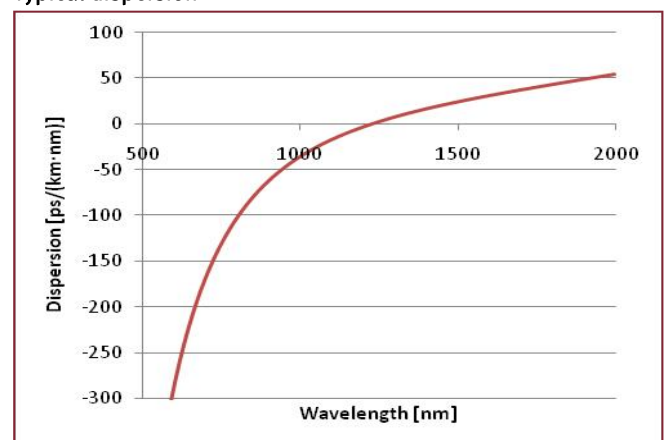
Mode properties	Single mode
Attenuation @ 532 nm	< 30 dB/km
Attenuation @ 780 nm	< 10 dB/km
Mode field diameter @532 nm	12.5 ± 1.5 μm
Mode field diameter @780 nm	12.5 ± 1.5 μm
Numerical aperture @ 532 nm	~ 0.04
Numerical aperture @ 780 nm	~ 0.05



Typical measured spectral attenuation



Typical dispersion



LMA-15-100409