

LMA-15

Single-mode 15 μm core fiber



- Low fiber loss from 500 to 1700 nm
- Single-mode at all wavelengths
- Radiation hard pure silica fiber
- Wavelength independent MFD

This single-mode large mode area fiber combines a large effective mode field area ($\sim 125 \mu\text{m}^2$) 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 delivers excellent mode quality at all wavelengths

This product is also available in a polarization-maintaining version as the LMA-PM-15.

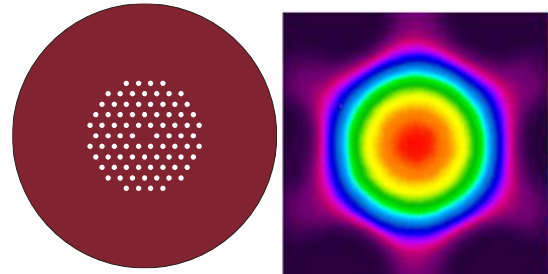
Optical properties	
Single mode cut-off wavelength*	None
Attenuation @ 532 nm	$< 30 \text{ dB/km}$
Attenuation @ 632 nm	$< 20 \text{ dB/km}$
Attenuation @ 1064 nm	$< 8 \text{ dB/km}$
Mode field diameter @ 532 nm ($1/e^2$)	$12.5 \pm 1.5 \mu\text{m}$
Mode field diameter @ 1064 nm ($1/e^2$)	$12.8 \pm 1.5 \mu\text{m}$
NA @ 1064 nm (5%)	0.07 ± 0.02
Physical properties	
Core diameter	$15.1 \pm 0.8 \mu\text{m}$
Outer cladding diameter, OD	$230 \pm 5 \mu\text{m}$
Coating diameter	$350 \pm 10 \mu\text{m}$
Core and cladding material	Pure silica
Coating material, single layer	Acrylate
Coating concentricity	$< 10 \mu\text{m}$
Proof test level	0.33 %

Standard interfacing options	
FC/PC connector	$0.0 \pm 0.5 \text{ deg angle}$
FC/APC connector	$8.0 \pm 0.5 \text{ deg angle}$
Collapse and cleave	$0.0 \pm 0.5 \text{ deg angle}$

All interfaces are provided with a $150 \pm 25 \mu\text{m}$ sealing length of the PCF structure.

Please contact us for other custom interfacing options.

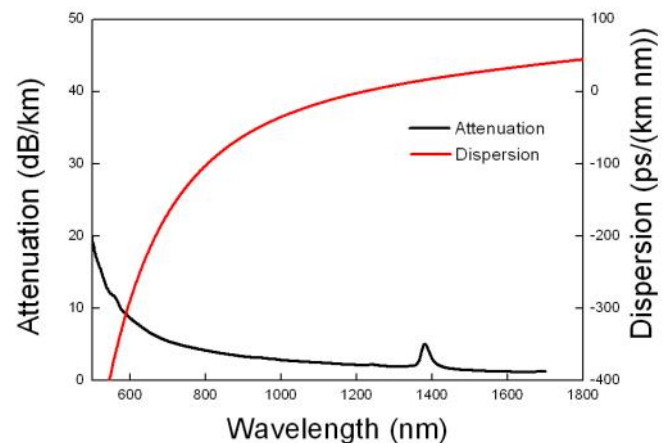
* TIA-455-80-C standard



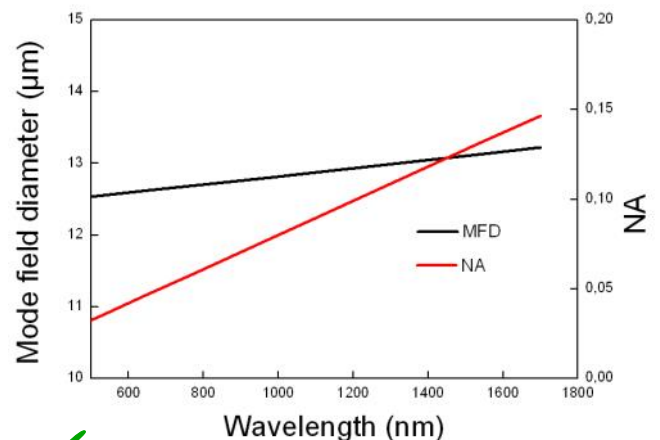
Applications

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

Typical spectral attenuation and dispersion



Typical MFD and NA



LMA-15-v1-141212