

# LMA-20

## Single-mode 20 $\mu\text{m}$ core fiber

- Low fiber loss from 600 to 1700 nm
- Single mode at all wavelengths
- High threshold power for nonlinear effects
- Radiation hard pure silica fiber
- Wavelength independent MFD

This single-mode large mode area fiber combines a large effective mode field area ( $\sim 215 \mu\text{m}^2$ ) 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 pristine mode quality at all wavelengths.

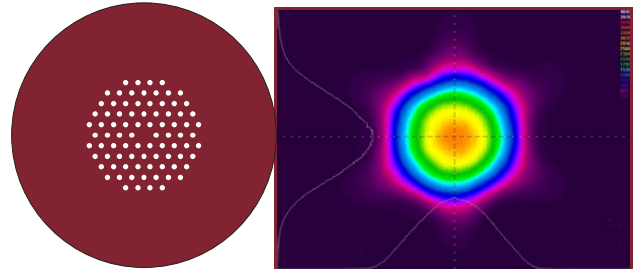
Optical properties	
Single mode cut-off wavelength*	None
Attenuation @ 632 nm	$< 25 \text{ dB/km}$
Attenuation @ 780 nm	$< 7 \text{ dB/km}$
Attenuation @ 1064 nm	$< 5 \text{ dB/km}$
Mode field diameter @ 780nm ( $1/e^2$ )	$16.4 \pm 0.5 \mu\text{m}$
Mode field diameter @ 1064 nm ( $1/e^2$ )	$16.5 \pm 0.5 \mu\text{m}$
NA @ 1064 nm (5%)	$0.05 \pm 0.02$
Physical properties	
Core diameter	$19.9 \pm 0.5 \mu\text{m}$
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.

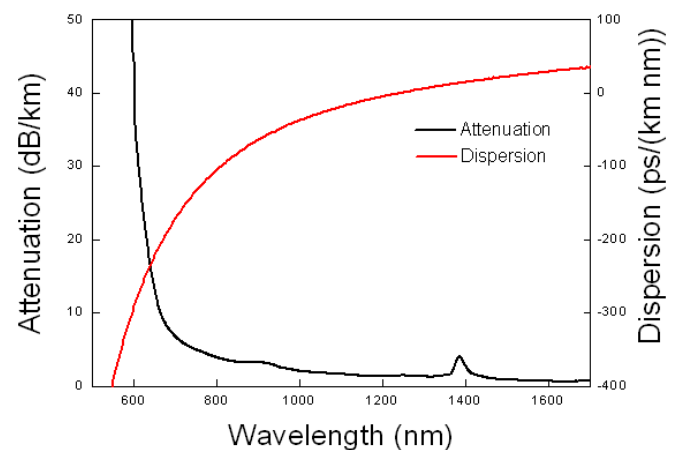
\* TIA-455-80-C standard



### Applications

- Single-mode high power delivery
- Multi-wavelength transmission
- Mode filtering
- Single-mode pigtailling

### Typical spectral attenuation and dispersion



### Typical NA and Mode field diameter

