

Wide bandwidth Single mode Mid Infrared Fibers

Advantages

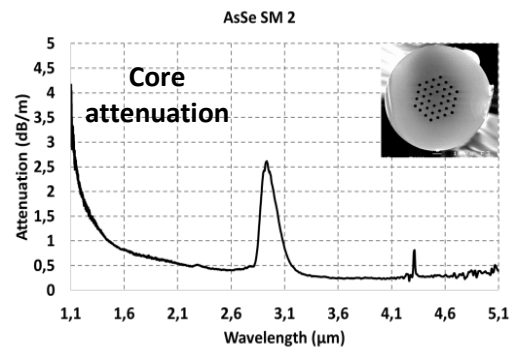
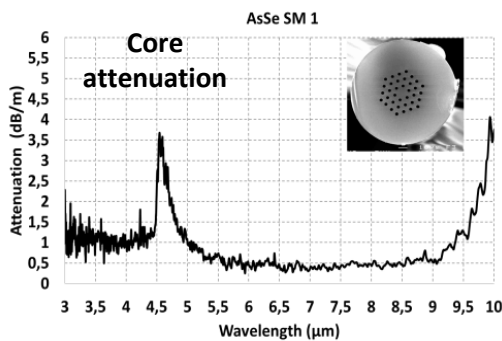
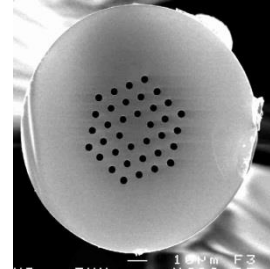
- Transmission from 1.5 up to 10 μm
- Low losses transmission
- Great spatial beam quality

Applications

- Mid-IR Laser Beam Delivery (QCL, OPO)
- Nonlinear Applications: Supercontinuum

Specifications

Reference	AsSe SM1	AsSe SM2
Glass		$\text{As}_{32}\text{Se}_{68}$
Refractive Index @1.55 μm		2.81
Nonlinear Refractive Index n_2	$\approx 1.1 \cdot 10^{-17} \text{ (m}^2/\text{W) } (\approx 500 \cdot n_2 \text{ silica})$	
Transmission Range (μm)	3-9	1.5-8
Typical Attenuation (dB/m)	2.5 @ 1.55 μm $\alpha < 1$ @ [5-9] μm	< 2.5 @ 1.55 μm < 1 @ [3.2-8] μm
Core diameter (μm)		≈ 13
Cladding Diameter (μm)		≈ 125
Typical Numerical Aperture @5 μm		0.4
Zero Dispersion Wavelength (μm)		≈ 5



New: Fiber Connectorized with FC/PC Connectors

Preliminary specifications:

- Available in FC/PC connector
- Protective jacket: 3 mm cable
- Low core concentricity error in connector < 2 μm