

DESCRIPTION

In addition to multimode fibers, IRphotonics also offers complete and ready-to-use mid infrared fiber patchcords.

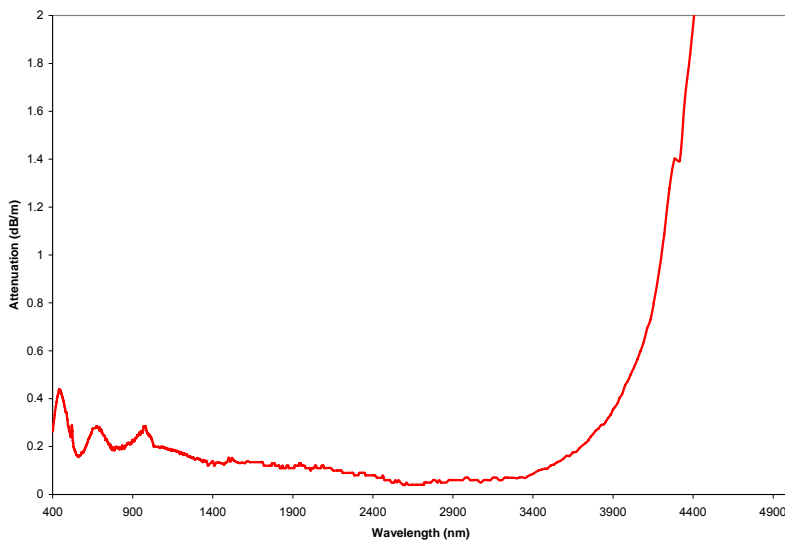
Since the handling techniques for mid-infrared fibers are somewhat different from those of standard silica fibers, we use our in-depth knowledge of the fiber to provide high quality patchcords that take into account the special properties of IR materials.

Adequate sheathing can greatly improve the robustness and reliability of mid-infrared fiber.

FEATURES

- Transparent in UV, VIS, NIR, MID-IR
- Flat Spectral Attenuation
- Low Loss Mid-IR Multimode fibers
- FC, SMA, APC connectors available
- Various cabling and jacketing options

TYPICAL SPECTRAL ATTENUATION



Mid-Infrared Fiber Patchcords and Assemblies



FIBER SPECIFICATIONS

- Spectral Transmission from 0.3 to 4.5 μm
- Fiber Core Diameter from 85 μm to 600 μm
- Operating Temperature: -20 $^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$
- Standard Numerical Aperture: 0.2 +/- 0.02
- Low Attenuation*: < 0.2 dB/m in 1.3 to 3.8 μm range

* Excluding connector loss

APPLICATIONS

- Spectroscopy
- Industrial/Scientific Diagnostic
- Astronomy
- Chemical sensing
- Laser beam delivery

SPECIFICATIONS

Multimode Fiber Patchcord Specification	M085	M100	M200	M300	M450	M600
Core Diameter	85 $\mu\text{m} \pm 7$	100 $\mu\text{m} \pm 7$	200 $\mu\text{m} \pm 7$	300 $\mu\text{m} \pm 10$	450 $\mu\text{m} \pm 15$	600 $\mu\text{m} \pm 15$
Cladding Diameter	125 $\mu\text{m} \pm 2$	150 $\mu\text{m} \pm 5$	250 $\mu\text{m} \pm 7$	350 $\mu\text{m} \pm 10$	520 $\mu\text{m} \pm 15$	700 $\mu\text{m} \pm 15$
Connectors	FC or SMA	FC or SMA	FC or SMA	FC or SMA	FC or SMA	FC or SMA
Standard Jacket	3mm PVDF	3mm PVDF	3mm PVDF	3mm PVDF	Stainless Steel	Stainless Steel
Minimum Bend Radius	20 mm	20 mm	30 mm	50 mm	140 mm	160 mm
Numerical Aperture	0.2	0.2	0.2	0.2	0.2	0.2

ORDERING INFORMATION

1st) Indicate the product code:

M	YYY	S	20	I	O	J
	Core Diameter		NA= 0.20	Connector In	Connector Out	Jacket
	085			S = SMA	S = SMA	P = PVDF
	100			F = FC/PC	F = FC/PC	S = Stainless Steel
	200			A = FC/APC	A = FC/APC	
	300					
	450					
	600					

2nd) Indicate the desired fiber Length in meters: **L = x m** (1 to 5 meters as Standard)

Examples:

M085S20SSP with L = 1m for a 1m long 85/125um fiber PVDF with SMA on both ends

M200S20SAS with L = 5m for a 5 m long 200/250um Stainless Steel SMA in and FC/APC out.

M450S20SSP with L = 2m for a 2 m long 450/520um PVDF SMA both ends

IRPHOTONICS CUSTOMIZATION PROGRAM

If you have any unique requirements, please contact us to discuss tailoring a product or design to optimize optical performance for your specific application. Custom NA's, fiber diameters and other specifications can be adapted to your requirements.

Contact IRphotonics for prices and availability or to obtain the name of your local representative.

IRphotonics has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation.