Optical Fiber Assemblies



Features

- Wavelengths from 250-2100nm
- Singlemode, Polarization maintaining and Multimode fibers
- Low insertion loss
- Low return loss
- 900μm, 3mm jackets or Stainless Steel armored jacket for demanding applications.
- FC, FC/APC and SMA connections

High performance Singlemode and Polarzation Maintaining cable assemblies are available from 250nm to 2100nm. End face needs to be free of any flaws in order to be used with our fiber collimators as any flaw will be magnified. All singlemode and polarization maintaining fibers are labeled for wavelength.

Multimode cable assemblies are available with graded or step index profiles. Most popular sizes of $50\mu m$, $100\mu m$, $200\mu m$ are available. All fibers are labeled for type and size.

Fibers are available in standard or radiation resistant type.

Fibers are terminated with FC, FC/APC or SMA connectors. Other connectors such as AVIM, non-magnetic or ferrule only are available. Standard fiber jackets are $900 \mu \text{m},$ 3mm and stainless steel armor.

All cable assemblies are labeled for wavelength or core size. Jackets and boots are color coded for type of fiber and polish end type.



12841 Western Ave. Suite H, Garden Grove, CA 92841
Ph: 714-898-6001 Fx: 714-897-0979 Email: sales@microlaser.com Web: www.microlaser.com

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Fibers Available

Singlemode Fibers

Fiber	Useful Range	Mode Field Dia.
405 nm	400 - 550 nm	3.6µm at 405nm
460 nm	460 - 600 nm	3.5µm at 460nm
630 nm	630 - 830 nm	4.0μm at 630nm
780 nm	780 - 970 nm	5.0µm at 850nm
980/1064 nm	980 - 1600 nm	5.9μm at 980nm 6.2μm at 1060nm
1310/1550 nm	1300 - 1625 nm	9.2μm at 1310nm 10.4μm at 1550nm
1950 nm	1850 - 2200 nm	8.0μm at 1950nm

Polarization Maintaining Fibers (Panda type)

Fiber	Useful Range	Mode Field Dia.
355 nm	350 - 460 nm	2.3µm at 350nm
405 nm	400 - 500 nm	3.6µm at 405nm
460 nm	460 - 550 nm	3.5µm at 460nm
630 nm	630 - 780 nm	4.2µm at 630nm
780 nm	780 - 980 nm	5.3µm at 850nm
980/1064 nm	980 - 1064 nm	6.6µm at 980nm
1300 nm	1280 - 1340 nm	9.5µm at 1300nm
1550 nm	1490 - 1620 nm	10.4µm at 1550nm
1950 nm	1850 - 2200 nm	8.0μm at 1950nm

Multimode Fibers

Fiber	Useful Range
50 μ m core, Graded index	800 - 1350 nm
100 μ m core, Graded index	800 - 1350 nm
50 μ m core, Step index	180 - 900 nm
50 μ m core, Step index	700 - 1900 nm
100 μ m core, Step index	180 - 900 nm
100 μ m core, Step index	700 - 1900 nm
200 μ m core, Step index	180 - 900 nm
200 µm core, Step index	700 - 1900 nm

These are the most popular fibers. Other specialty fibers and larger core sizes are also available.

Singlemode Fiber Assembly Characteristics

Insertion loss:	<0.1 dB
Return loss:	<-57 dB standard <-72 dB for APC

PM Fiber Assembly Characteristics

Insertion loss:	<0.3 dB
Extinction ratio:	27 dB or better
Return loss:	<-50 dB standard <-65 dB for APC

Jackets Available

900 μm

3 mm

Stainless steel sheath

Connectors Available

FC, FC/APC SMA

Other connectors such as AVIM, Mil-DTL-38999, Mil-T-29504, metal probes, ferrule only and other types are also available.

All cables are labeled for wavelength on singlemode fiber or core size for multimode fibers. Boots are color coded for standard, angled connection, polarization or high power. Fiber jacekts are color coded for fiber type or wavelength.

Cable assemblies for radiation, space, vacuum and vibration environments are made on a custom basis.

One meter length fibers terminated with FC/UPC or FC/ APC connections are usually in stock.



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