



LEAD Fiber Optics PRODUCT CATALOGUE

FIBER COLLIMATOR

Fiber Collimator



Fiber Collimators are devices used to expand and collimate the output light at the fiber end, or to couple light beams between two fibers. They are a module that combine a fiber and a lens, and has a function that produces parallel beams. When the fiber collimators are manufactured, the positions of the fiber and lens are adjusted so that parallel beams can be obtained, and this generally requires extremely fine adjustments. The more energy the fiber collimator is able to gather from the source and launch into the fiber end.

Fiber collimator is the basic elements for in line fiber components, such as [Fiber Optic attenuator](#), [Optical Isolator](#), [Optical Switch](#), [CWDM module](#), [DWDM module](#), [Optical circulator](#).

The stronger signal strength and the higher the system efficiency. The higher efficiency means time and money saved in fewer system components and greater design freedom.

Our Fiber Collimators are ultra reliable devices featuring low insertion loss, low back reflection, small beam divergence, and excellent optical properties over wide range of temperature and wavelength applications.

LFO provides both single mode fiber collimator (1310nm or 1550nm) and multi mode fiber collimator (850um or 1310nm). The Lens diameter of fiber collimator is 1.8mm or 1.0mm. Package in metal holder or glass tube and fiber length is 1.0mm or 1.5mm. These highly reliable single mode fiber collimators or multimode fiber collimators also come with your choice of various types of pigtail and connector terminations to meet your requirements.

LFO Fiber Collimator Series



Fiber Collimator

The fiber collimator provides collimated light beam to or from the optic fiber. It is widely used in almost all micro optic components. LFO Fiber Collimators are ultra reliable devices featuring low insertion loss, low back reflection, small beam divergence, and excellent optical properties over wide range of temperature and wavelength applications.

Fiber Collimator

Features

- Low insertion Loss
- Low back reflection
- Small Beam divergence
- Miniature in size
- Light weight
- Singlemode or multimode application
- Environmentally stable

Applications

- Optical devices
- Optical switching
- Fiber sensing
- Testing equipment



Specifications

ITEM	VALUES		
	Singlemode	Multimode	
Mode Type	Singlemode	Multimode	
Wavelength, nm	1310 or 1550	850	1310
Spectral Width, nm	$\geq \pm 30$		
Typical Insertion Loss, dB	0.2	0.6	0.8
Maximal Insertion Loss, dB	0.3	0.8	1.0
Return Loss, dB	≥ 55	---	
Beam Divergence, deg.	≤ 0.25	≤ 1	
Acceptance angel, deg.	≤ 0.15	≤ 1	
Beam offset angle, deg.	≤ 1		
Beam Diameter, mm	≤ 0.5	≤ 1	
Working Distance, cm	0.5~1.5		
Operation Temperature, °C	-20°C ~ 60°C		

Fiber Collimator Ordering information

FC

XX

XX

XX

X

XX

XXX(cm)

Connector

11-ST
21-FC/PC
22-FC/APC
31-SC/PC
32-SC/APC
41-LC/PC
51-MU/PC
00-None
XX-Others

Pigtail length

050- 50cm
100- 100cm
150- 150cm
200- 200cm
XXX-Others

Fiber type

1-Singlemode fiber
2-corning 50/125um
3-corning 62.5/125um
X-Others

Wavelength

31-1310 nm
55-1550 nm
85-850 nm (Multimode only)
XX-Other

Package

01- w / metal tube
02- w / o metal tube

Cable type

01-coated fiber(250um)
02-loose tube
XX-Others

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