



Multimode Components



Key Features

Ultra-precise Wavelength Matching

Wide Bandwidth
& Reflectivity Range

Wide Variety of Fiber Types

High Power Handling

RoHS Compliant

Applications

Pump Lockers

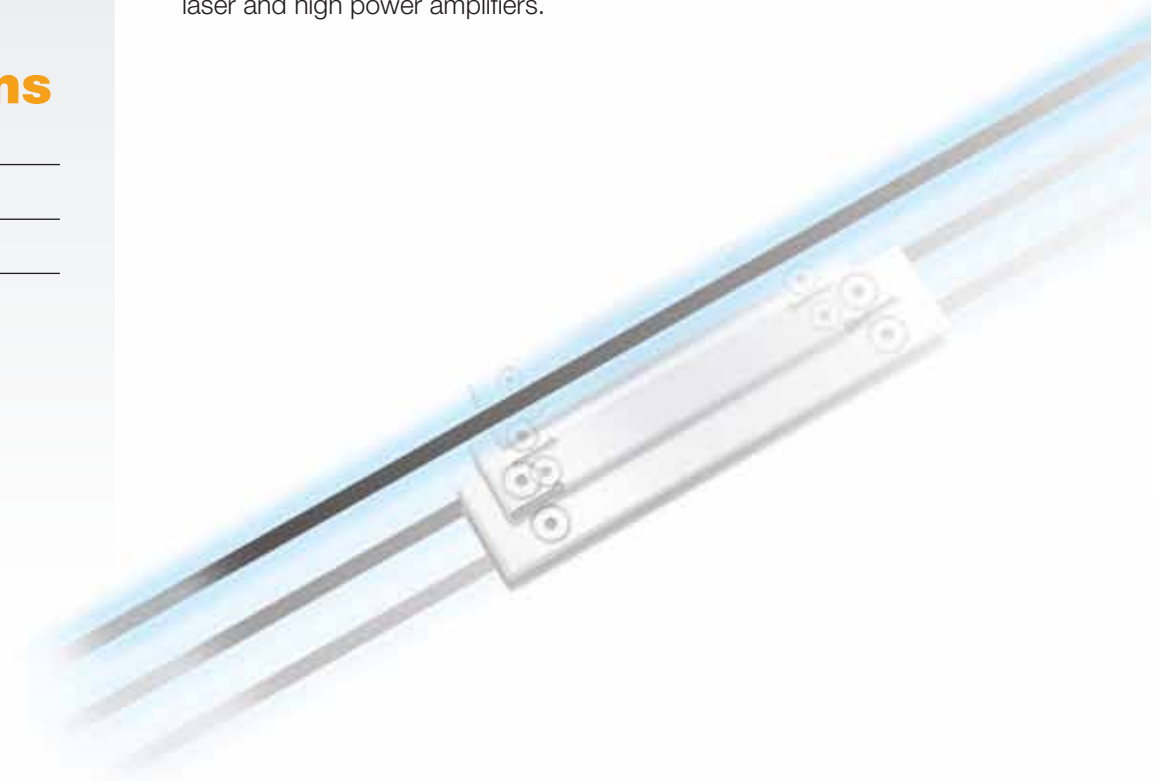
Fiber Lasers

Sensors

Fiber Laser Mirror Gratings

FBG Mirrors are based on the reflective properties of the Fiber Bragg Grating (FBG) written in the core of an optical fiber waveguide. FBG mirrors' principal application is to use a high and low reflector to form a stable laser cavity having the lasing wavelength selected by the low reflector.

In addition to its many years experience in manufacturing reliable high performance FBGs in volume, ITF Labs has worldwide leading technologies in multi-mode fiber coupling, optical test & measurement as well as mode field adaptation. ITF Labs has developed a family of FBG mirrors for fiber laser and high power amplifiers.



For more Info

Please contact us at:

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Fiber Laser Mirror Gratings

SPECIFICATIONS* STANDARD CONFIGURATIONS

Wavelength range	Ytterbium, erbium					
	5/125 μm - 6/130 μm - 10/125 μm - 10/200 μm		20/400 μm NA=0.06/0.46		25/250 μm NA=0.06/0.46	
Fiber Type (1), (2)	NA		< 20 dB		< 20 dB	
Coupling from LP01 to other modes (3)	Yes		Under development		Under development	
PM version available	HR	OC	HR	OC	HR	OC
High Reflector / Output Coupler	> 99.9%	3% - 20%	> 99.5%	3% - 20%	> 99.5%	3% - 20%
LP01 Reflectivity	1-3 nm	0.2-1 nm	1-3 nm	0.2-1 nm	1-3 nm	0.2-1 nm
Bandwidth (FWHM)	0.2 nm					
Wavelength matching HR-OC	Low index polymer recoat		High power package (60 x 12 x 6.5 mm)		High power package (60 x 12 x 6.5 mm)	
Package / Recoat	< 0.1°C/W (fiber on heat sink) < 0.2°C/W (fiber in air)		< 0.05°C/W (fiber in air)		< 0.05°C/W (fiber in air)	
Temperature increase per watt (3), (4) (915 nm pump, NA < 0.46) (3)	< 10 pm/°C		< 15 pm/°C			
Wavelength dependance with temperature (4), (5)	30W		1KW		300 W	
Power Handling	30W		1KW		300 W	
Core Light	30W		1KW		300 W	
Cladding Light (3), (6)						

- (1) Other fibers on request
- (2) Fluorine free
- (3) Preliminary specification, subject to change
- (4) Depends on heat sinking efficiency
- (5) At ~1080 nm
- (6) Tested at 915 nm

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*Specifications subject to change without notice.

ORDERING INFORMATION

For standard products, please use product codes specified above. ITF Labs can also develop custom products to meet a wide range of technical requirements.

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