

# Fiber Optical Bragg Grating



400-2000nm, SM, PM, MM

DATASHEET

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The FBG Series fiber optic grating is formed by periodically and permanently changing the refractive index of the fiber core with a high power laser irradiation. It features low optical loss and low cost. Our FBG is packaged in a thermal material that reduces its sensitivity to temperature variations. Special package this is sensitive to environmental perturbation is available for sensor applications.

## Optical Function

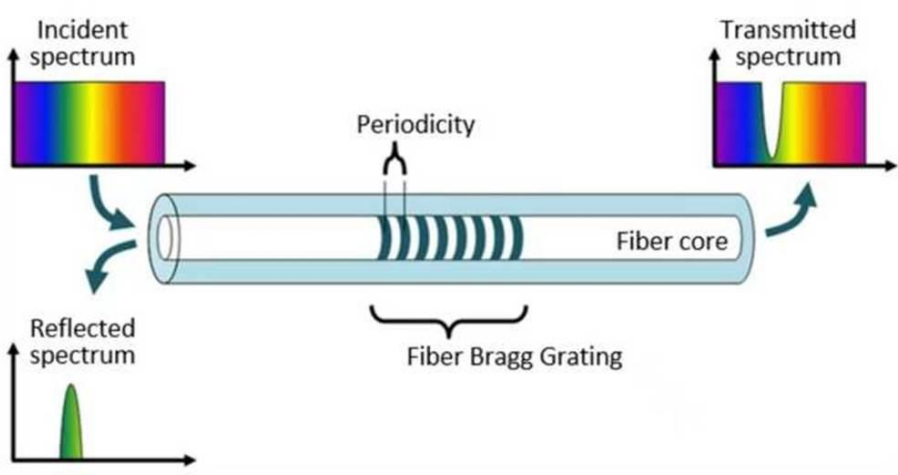
As a light enters a FBG, each line in the grating reflects back some of the light for the particular wavelength it is spaced for, while the rest of the light passing through. A large number of lines are often formed in a FBG that can cause complete reflection >99%.

## Features

- High Reliability
- Low Excess Loss
- High Power
- Low Cost

## Applications

- Sensors
- Instruments



## Specifications

Parameter	Min	Typical	Max	Unit
Wavelength	400		2200	nm
Wavelength Accuracy		± 1		nm
Bandwidth		0.3		dB
Reflectivity of HR		> 92		%
Side Mode Suppression Ratio		> 15		dB
Operating Temperature	-5		62	°C
Storage Temperature	-40		85	°C

**Note:** The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [click this link](#):

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### Mechanical Dimension (mm)

\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

### Ordering Information

Prefix	Wavelength	Linewidth	Fiber	Fiber Cover	Fiber Length	Connector
<b>FBGF-</b>	1550.5nm = 15505 1310.5nm = 13105 2000.5nm = 20005 1750.0nm = 17500 1080.2nm = 10802 980.5nm = 09805 450.5nm = 04505	0.5nm = 1 1nm = 2 2nm = 3 Special = 0	SM28 = 1 GDF 10/130 = 4 LMA 14/250 = 5 Special = 0	250µm = 1 0.9mm tube = 2 Polyimide = 3 AlSi = 4 Special = 0	0.5m = 1 1m = 2 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 LC/APC = 8 Special = 0