PHOTONWARES

Fiber Optical Grating (FBG)

980.1060. 1080.1310.1550nm

Product Description

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 athermal material that reduces its sensitivity to temperature variations. Special package this is sensitive to environmental perturbation is available for sensor applications.

Features

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

Performance Specifications

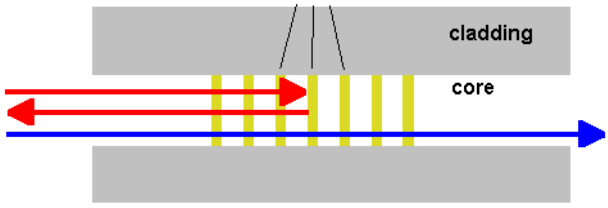
FBG Series	Parameter	Unit
Wavelength	980,1060,1080,1310,1550	nm
Wavelength Accuracy	± 1	nm
Bandwidth	0.3	dB
Reflectivity of HR	>92	%
Side Mode Suppression Ratio	>15	dB
Operating Temperature	-5~62	°C
Storage Temperature	-40~85	°C
Package Dimension	Bare fiber 250um: (ϕ)3x(L)80	mm

Applications

- Sensors
- Instruments

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% .



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(Click here for latest revision)

15 Presidential Way, Woburn, MA 01801 Tel: (781) 935-1200 Fax: (781) 935-2040
www.agiltron.com

Mechanical Dimensions (mm)

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

Ordering Information

FBGF-	☐☐	☐	☐	1	☐	☐	☐	☐
	Configuration	Wavelength	power		Fiber	Fiber Jacket	Fiber Length	Connector
	11	1550=1 1310=2 1060=3 1080=4 980 =5	0.3W=1 20W=2 1KW=3		Standard=1 GDF 10/130 NA0.08/0.46=4 LMA 14/250=5 Special=0	250μm=1 0.9mm tube=2 2mm tube =3 3mm tube =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 = 7 Special = 0

[1] integrated tap monitor is available
[2] polarization extinction ratio is only for PM fiber
[3] high ER is expensive using micro-optic filter with excess loss about 0.8dB
[4] This fiber is lower cost but higher loss

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