

High Temperature FBG

High temperature FBG is inscribed into a Polyimide coated fiber, which is excellent heat resisting (up to 300°C) and great adaptability in harsh environment such as oil and gas, power station, etc. AtGrating can customize high temperature FBG for various applications.

Key Features

- High stable wavelength
- High stable reflectivity
- High Temperature Operation
- Splice-free array

Applications

- Bridges and highways
- Petroleum tanks and pipelines
- Power switch cabinet
- Aerospace

Specifications

Parameter	Unit	Value			
Center Wavelength	nm	1460 ~ 1610			
FBG Profile	--	Apodized			
Wavelength Tolerance	nm	±0.5			
FBG Length	mm	3	5	10	15
Reflectivity	%	≥50%	≥70%	≥85%	≥90%
Bandwidth (FWHM)	nm	≤0.7	≤0.5	≤0.3	≤0.3
SLSR	dB	≥10	≥10	≥15	≥15
FBG Recoating	--	None, Polyimide or custom			
Tensile Strength	kpsi	>100			
Fiber Type	--	Single-Mode			
Fiber Coating	--	Polyimide			
Pigtail Length	m	Standard 1m both ends, or custom			
Optical Connector	--	Bare Fiber, FC/APC, SC/APC, or custom			
Operating Temperature	°C	-40 ~ +300			

