

# Fiber Bragg Grating for Sensing

## Description

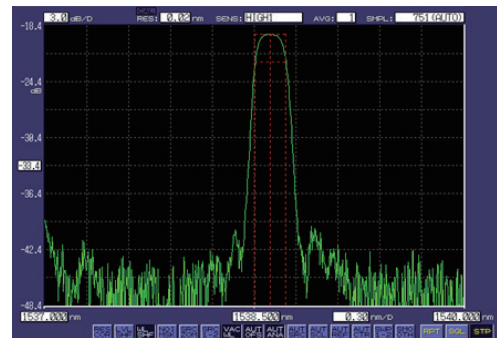
Fiber Bragg grating (FBG) is a kind of wavelength reflective optical device made on optical fiber through ultraviolet light and phase mask technology. It is a basic optical fiber sensing element and is widely used in many fields such as communication and sensors. T&S provides customers with various standard or customized high-performance apodized fiber gratings.

## Features

- High stability and reliability
- Customized grating length
- High SMSR

## Application

- Various fiber bragg grating sensors



## Specification

Item	Unit	Specification				
Central Wavelength	nm	1510 to 1590				
Wavelength Tolerance	nm	±0.3			±0.5	
Grating Length	mm	3	5	10	≤15	≤15
Stripping Length	mm	≤10	≤10	≤20	≤20	≤20
Reflectivity	-	≥70%	≥75%	≥90%	≥95%	≥99%
-3dB Band Width	nm	≤0.7	≤0.7	≤0.3	≤0.3	≤0.5
SLSM	dB	≥15			≥10	
Minimum Spacing	mm	5				
Recoating	-	Acrylate / Polyimide				
Tensile Resistance	Kpsi	≥100				
Fiber Type	-	SMF-28e / Polyimide coated optical fiber				
Connector Type	-	FC/APC or Customized				
Operating Temperature	°C	SMF-28e Fiber: -20~120; Polyimide coated optical fiber: -40~300				