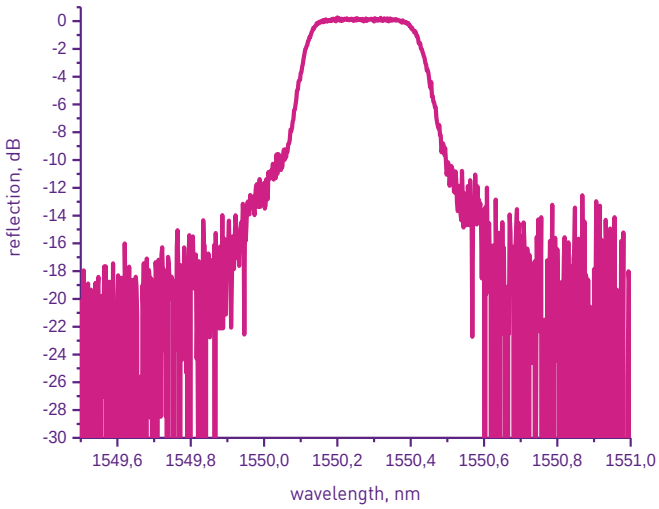
FIBER BRAGG GRATINGS (FBG)

APODIZED FBG

ARTICLE GTL-FBG-AD-820

Fiber Bragg Gratings have many applications in optical communication, laser technique and sensing systems. The FBGs are widely used like in-fiber mirrors or optical filters with narrow band optical spectrum. FBGs can be used like a sensitive element for strain and temperature measuring.



The Apodized FBGs have special profile of induced refractive index and grating strength along the grating length. Therefore, side lobes level becomes smaller in compared to ordinary gratings. There are a lot of apodized profiles which lead to the optimization of various FBG parameters (strength, FWHM, SLSR). Apodized FBGs are useful in sensing applications, signal and Brillouin scatter filtering and others. Possible value of SLSR for different grating strength is -10dB to -30dB. The reflection spectrum of Apodized HR FBGs is presented in the graph.

FBG CHARACTERISTICS	GTL-FBG-AD-820	TOLERANCE/NOTE
Wavelength range, nm	600 ÷ 2300	± 0.1 ÷ ± 1 custom request
Types of fiber	Single-Mode, PM, Double clad, LMA	or custom
Wavelength to quick order, nm	633, 780, 794, 797, 799, 801, 809, 830, 852, 895, 940, 976, 1030, 1057, 1060, 1064, 1080, 1125, 1150, 1178, 1240, 1270, 1310, 1484, 1510 ÷ 1580, 1650, 1900, 1908, 1952, 2300	± 0.1 ÷ ± 1 custom request
Reflectivity, %	0.5 ÷ 99.9	2 ÷ 5 custom request
Bandwidth (WFHM), nm	0.1 ÷ 1.2	custom request
SLSR, dB	› 10 or › 15	custom request
FBG Pigtail Length, m	≥ 0.5	or custom
FBG Recoating	None, Acrylate, Polyimide, Aluminium, Copper	or custom
Optical Connector	Bare fiber, FC/APC, LC/APC	or custom

The configuration can be changed at the customer's request. The parameters specified in this specification can be changed in accordance with the terms of reference.