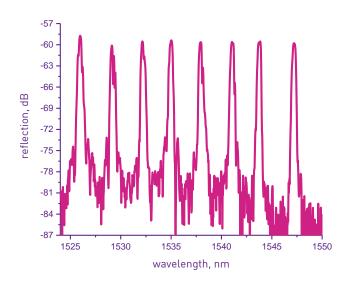
FEMTOSECOND FBG

FIBER BRAGG GRATINGS (FBG)

ARTICLE GTL-FBG-FS-880

Femtosecond FBGs can make into all optical transparent fiber materials with a broad variety of fiber coatings without strip the coating from fiber and without recoated in future. Optical sensors based on Fs FBGs let monitor temperature, pressure and deformation of such objects that hadn't been eligible for sensing before. FBGs written in radiation resistant pure silica core fibers are ideal for using in nuclear industry. Fs FBG inscription thought the fiber protective coating has excellent mechanical strength that very important in strain sensing application.



| FBG CHARACTERISTICS | GTL-FBG-FS-880 | TOLERANCE/NOTE |
|--|--|----------------------------|
| Wavelength range, nm | 1000 ÷ 2300 | ± 0.1 ÷ ± 1 custom request |
| Types of fiber | Single-Mode, PM, Double clad, LMA, Rad resistance | or custom |
| Reflectivity, % | 0.01 ÷ 95 | 2 ÷ 5 custom request |
| Bandwidth (FWHM), nm | 0.05 ÷ 1 | custom request |
| SLSR, dB | < 8 ÷ 25 | custom request |
| FBG Pigtail Length, m | ≥ 0.5 | or custom |
| FBG inscription thought the fiber protective coating | Acrylate, Polyimide | or custom |
| FBG Recoating | Aluminium, Copper | or custom |
| Tensile Strength, kpsi | > 100 | |
| 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.