

respectively, which is compatible with a standard single mode silica fiber in the 850 nm region. The step index fiber has a minimum attenuation of 4.197 dB/m at 862 nm, which we anticipate can be further reduced by improving the preform production process. A fiber Bragg grating has also been inscribed in the proposed fiber in 4 minutes with as little as 6mW power from a CW He-Cd laser. We believe that FBGs inscribed in this step index fiber are particularly suitable for sensing applications that require high operating temperature and very low moisture absorption.

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