



Verrillon®

VSS200 Series Photosensitive Fiber

VSS200 Photosensitive Fiber is a single-mode fiber with modified glass chemistry designed to enhance the sensitivity of the glass core to UV light, which allows for high efficiency, high quality Fiber Bragg Grating (FBG) writing with extremely short UV exposure. The high glass sensitivity of this fiber allows for FBG writing 5 times faster than with standard single-mode fibers, which significantly increases productivity in mass production of FBGs. This fiber is also suitable for FBG arrays used in quasi-distributed sensing applications.

Features

- Designed to provide high level of cladding mode suppression
- High level photosensitivity reduces time needed to write gratings
- Acrylate coating strips easily to simplify FBG processing
- Mode-field compatible with standard SMF to decrease splice loss
- Excellent for high-quality Fiber Bragg Gratings (FBGs)

Applications

- Fiber Bragg Gratings (FBGs)
- Telecommunication networks
- Quasi-distributed sensing
- Optical add/drop filters
- Pigtails in telecom devices
- Gain-flattening filters (GFF) for EDFAs

Specifications

PART NO.	PSF-1-A-125-1
Description	125/243 μm Acrylate coated, Single-mode Fiber, 0.14 NA, 100 kpsi
PARAMETER	VALUE
Material	
Coating	Dual UV Acrylate
Geometry	
Clad Diameter (μm)	125 ± 1
Core/Clad Offset (μm)	≤ 0.3
Combined Coating Diameter (μm)	243 ± 3
Optical	
NA (nominal)	0.14
Cutoff Wavelength (nm)	≤ 1300
Mode Field Diameter ¹ @ 1550 nm (μm)	9.5 ± 0.2
Mechanical	
Proof Test (kpsi)	≥ 100
Operating Temperature (°C)	-40 to +85

¹ Petermann II Definition