Specialty Optical Fiber





Verrillon_® VSS700-BI80 Reduced Diameter Bend-Insensitive Single-mode

This 80 μ m Reduced-Diameter fiber is a Bend-Insensitive Single-Mode fully compatible with standard single-mode fibers for ease of splicing and low splice loss. This product is designed to offer Small Form Factor (SFF) and low macro-bend loss for applications requiring compact packaging with tight bending configurations.

Features

- Attenuation < 0.3 dB/km @ 1550 nm
- Extremely low bend-loss
- MFD compatible with standard 125 µm SMF for low-loss splicing
- Tight clad diameter tolerance +/- 1µm
- Available with standard acrylate coating for telecom applications
- Available with high temperature coatings

Specifications

PART NO.	SMF-12-A-80-4
Description	Small Form Factor Bend-Insensitive, reduced cladding single-mode. Fully matching standard single-mode MFD for reduced splice loss
PARAMETER	
Material	
Core	Silica-based
Cladding	Pure Silica
Coating	Dual-Acrylate
Geometry	
Core Diameter (µm)	-
Clad Diameter (µm)	80 ± 1
Core/Clad Offset (µm)	< 0.5
Coat Diameter (µm)	165 ± 10
Optical	
NA (nominal)	0.12
Attenuation @ 1310 nm (dB/km)	< 0.55
Attenuation @ 1550 nm (dB/km)	< 0.30
Cutoff Wavelength (nm)	1250 ± 50
Mode Field Diameter @ 1310 nm (dB/km)	8.8 ± 0.8
Mode Field Diameter @ 1550 nm (dB/km)	10 ± 1.0
Bend Loss (dB/wrap)* @1550 nm	≤ 0.1
Mechanical	
Prooftest (kpsi)	≥ 200
Operating Temperature (°C)	-40 to +85

* 5 wraps on 5 mm radius mandrel