DUAL BAND BEND INSENSITIVE FIBER

Telecoms style bend insensitive fibers with specialty coatings

These germanium doped Single-Mode (SM) fibers offer excellent performance in tight space environments and are available with a 9.8µm core size. This is compliant to ITU standard G657.A2.

These fibers are designed to withstand harsh environments such as high temperature, high pressure, moisture and chemicals. Applications in oil and gas, data transmission, offshore oil and gas asset monitoring, Enhanced Oil Recovery (EOR) (especially Steam Assisted Gravity Drainage (SAGD) techniques), borehole seismic and avionics can benefit by using these fibers.

Fibercore has developed a unique carbon coating, which offers significant barriers against hydrogen, moisture fatigue and acid ingression. The carbon coating also increases the lifetime of a fiber under tight and sharp bends, protecting the fiber from water/moisture attack/(micro cracking) to the fiber glass surface.

These fibers are available with high temperature acrylate, polyimide, carbon & high temperature acrylate and carbon & polyimide.for processing metals, ceramics, polymers, composites and glasses.

FEATURES

Advantages

- Bend insensitivity
- Ranges of coating and buffering
- Hermetic coating
- Low loss
- Good splice loss

Typical Applications:

- Avionics
- Data center and communication
- Oil & Gas
- Defence
- Well integrity monitoring

Product Variants

- SM1250BI(9.8/125)
  SM bend insensitive fiber with a 9.8µm core and a 125µm cladding
- SM1250BI(9.8/125)HT
  SM bend insensitive fiber with a 9.8µm core, 125µm cladding with a high temperature acrylate coating
- SM1250BI(9.8/125)CHT
  SM bend insensitive fiber with a 9.8µm core, 125µm cladding with a carbon and high temperature acrylate coating
- SM1250BI(9.8/125)P
  SM bend insensitive fiber with a 9.8µm core, 125µm cladding with a polyimide coating
- SM1250BI(9.8/125)CP
  SM bend insensitive fiber with a 9.8µm core, 125µm cladding with a carbon and polyimide coating

DUAL BAND BEND INSENSITIVE FIBER

SPECIFICATIONS

	SM1250BI (9.8/125)	SM1250BI (9.8/125)HT	SM1250BI (9.8/125)CHT	SM1250BI (9.8/125)P*	SM1250BI (9.8/125)CP
Operating Wavelength (nm)	1310 - 1650				
Cut-Off Wavelength (nm)	<1300				
Numerical Aperture	0.11 - 0.13				
Mode Field Diameter (µm)	9.0 - 10.6 @1550nm				
Attenuation (dB/km)	≤0.4 @1550nm				
Proof Test (%)	1 (100 kpsi)				
Cladding Diameter (µm)	125 ± 1		125 ± 2	125 ± 1	125 ± 2
Core Cladding Concentricity (µm)	<1.0				
Coating Diameter (µm)	245 ± 15			155 ± 5	
Coating Type	Dual Layer Acrylate	High Temperature Acrylate	Carbon and High Temperature Acrylate	Polyimide	Carbon and Polyimide
Operating Temperature (°C)	-55 to +85	-55 to +150		-50 to +300	

* Special easier to strip polyimide coating available for window stripping, for applications such as FBGs.

RELATED PRODUCTS

- Cables and Connectors

Fibercore House I Southampton Science Park
United Kingdom I SO16 7QQ
T +44 (0)23 8076 9893 I **E** info@fibercore.com

fibercore.com

FIBERCORE
A HUMANETICS COMPANY