

Brillouin Sensing Fiber

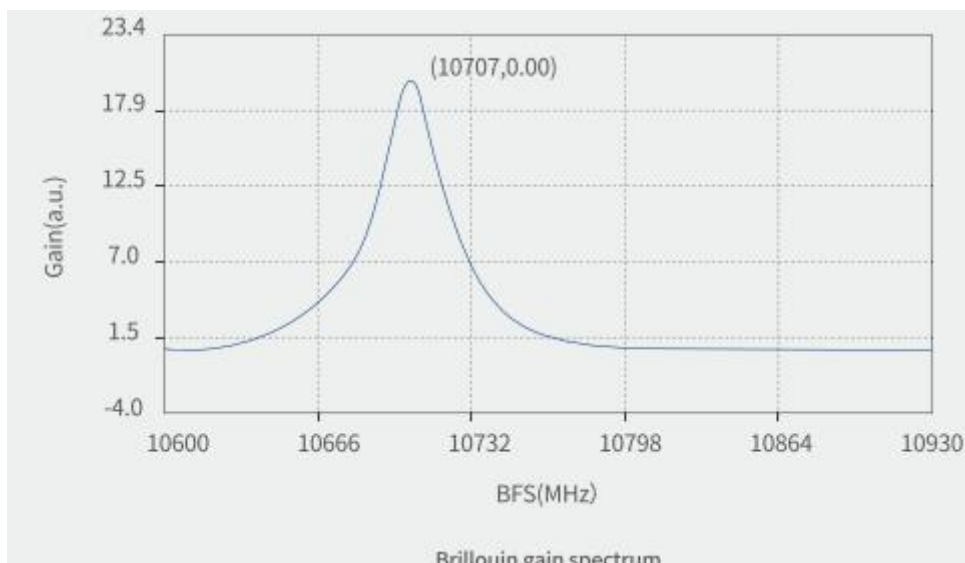


Applications

- Brillouin distributed temperature and strain sensing system

Characteristics

- Excellent optical properties and geometrical indicators
- Brillouin gain spectrum with single peak property
- Accurate Brillouin center frequency
- Definite temperature coefficient and strain coefficient
- Low attenuation
- Low splicing loss
- Excellent bending insensitivity



Specifications

Fiber Type		BR 9/125-14/250	
Part No.		BR1010-A	
Loss (dB/km)	@1310nm	≤0.34	
	@1383nm	≤0.34	
	@1550nm	≤0.20	
	@1625nm	≤0.23	
Cable Cut-off Wavelength(nm)		≤1260	
MFD(μm)	@1310nm	8.7~9.5	
	@1550nm	9.9-10.9	
Brillouin Ceter Frequency(GHz)		10.7	
Strain Coefficient(με/MHz)		19.26±0.2	
Temperature Coefficient(°C/MHz)		0.97±0.02	
Geometrical Properties			
Cladding Diameter(μm)		125.0±0.7	
Non-circularity of Cladding(%)		≤1.0	
Coating Diameter(nm)		245±0.7	
Coating/Cladding Concentricity(nm)		≤12.0	
Non-circularity of Coating(%)		≤6.0	
Core/Cladding Concentricity(μm)		≤0.6	
Macro Bending Attenuation			
Macrobend Loss(dB)	One Circle, Radius 16mm	@1550nm	≤0.05
	One Hundred Circles, Radius 25mm	@1310nm	≤0.05
	One Hundred Circles, Radius 25mm	@1550nm	≤0.05
Mechanical Properties			
Proof Test Level(kpsi)		≥100	
Environmental Properties			
Temperature Additional Attenuation(dB/km)	-60°C to +85°C		≤0.05