

# Polyimide Coated Optical Fiber

Specialty Fiber

## FEATURES

High Operating Temperature  
 Low Loss  
 Dual Layer Special Polyimide coating  
 Excellent Core/cladding concentricity  
 Single Mode or Multimode

## APPLICATIONS

Fiber Bragg Grating  
 Avionics  
 Fiber Sensors arrays  
 Military  
 Oil and Gas

Test Parameters	Specifications	
	Multimode	Single Mode
<b>Geometrical Properties</b>		
Numerical Aperture	0.275+/-0.015	0.12+/-0.01
Cladding Diameter	125 +/- 1.0 µm	125 +/- 1.0 µm
Core Diameter	62.5µm	9.8.µm
Cladding Non-circularity	< 1.0 %	< 1.0 %
Core / cladding Concentricity error	-----	< 1.0 µm
Coating Diameter	145 +/-5µm	145 +/-5 µm
Coating / cladding concentricity error	<10.0 µm	<10.0 µm
Mode Field diameter	-----	10.4 +/- 0.8 µm
Bandwidth at 850nm	160MHz Km	
At 1300nm	200MHz KM	
<b>Mechanical Properties</b>		
Fiber proof test level	0.70 Gpa 100 (1%) (kpsi)	0.70 Gpa 100 (1%) (kpsi)
Operating Temperature Range	-50 to +430 °C	-50 to +430 °C
Short Term	430°C(10Hrs) 400(100Hrs)	430°C(10Hrs) 400(100Hrs)
Lower Temperature range	Liquid Nitrogen	Liquid Nitrogen
<b>Optical Properties</b>		
Attenuation	<1.0 dB / km	<0.5 dB / km
Attenuation at 850nm	max 3.2dB/Km	
Cut off wavelength	<1400+/-50 nm	<1300+/-50 nm
Operating Wavelength	1450-1600nm	1300-1600nm
Bend Lossat 1550nm, per 100turns 25mm dia	<0.02dB	<0.02dB

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