



50 μ m, OM2 FIBER

DESCRIPTION	VALUE	UNIT
● Optical characteristics		
Attenuation	850 nm <2.3 <2.5 <2.7	[dB / km]
	1300 nm <0.55 <0.70 <0.80	[dB / km]
Overfilled Modal Bandwidth	850 nm >500 >400 <400	[MHz • km]
	1300 nm >1000 >800 <800	[MHz • km]
Numerical Aperture (NA)		0.200 \pm 0.015
Group index of refraction (typical)	850 nm	1.482
	1300 nm	1.477
● Backscatter characteristics	1300 nm	
Step (mean of bidirectional measurement)		<0.10 [dB]
Irregularities over fibre length and point discontinuity		<0.10 [dB]
Difference backscatter coefficient (bidirectional measurement)		<0.08 [dB / km]
● Geometrical characteristics		
Core diameter		50 \pm 2.5 [μ m]
Cladding diameter		125.0 \pm 1.0 [μ m]
Cladding non-circularity		<1.0 [%]
Coating diameter		242 \pm 7 [μ m]
Coating / cladding concentricity error		<12.0 [μ m]
Coating non-circularity		<6.0 [%]
Core / cladding concentricity error		<1.5 [μ m]
● Environmental characteristics	850 nm, 1300 nm	
Temperature dependence		
Induced attenuation	-60°C to +85°C	<0.10 [dB / km]
Temperature-humidity cycling		
Induced attenuation	-10°C to +85°C, 90% R.H.	<0.20 [dB / km]
Damp heat dependence		
Induced attenuation	85°C, 85% R.H., 30 days	<0.20 [dB / km]
Watersoak dependence		
Induced attenuation	20°C for 30 days	<0.20 [dB / km]
● Mechanical characteristics		
Proof test	off line	>9.0 [N]
		>1.0 [%]
		>100 [kpsi]
Bending Dependence	850 nm, 1300 nm	
Induced Attenuation	100 turns, 75 mm diameter	<0.50 [dB]
Coating strip force	typical average force	1.7 [N]
	peak force	>1.3 <8.9 [N]
Dynamic stress corrosion susceptibility parameter (nd, Typical)		>27