Bending Insensitive
Multi mode 50/125/250μm SCP Fiber

Product Code: SCP500

Basic Parameters of Fiber Optic

Specification						
Fiber Type		OM2	OM3		OM4	
Transmission Parameters of Fiber	Unit					
Attenuation						
850nm	dB/km	≦ 4.0				
1300nm	dB/km	≦ 1.5				
Overfilled Launch Bandwidth (OFL BW)						
850nm	MHz･km	≧ 500	≧ 1500		≧ 3500	
1300nm	MHz･km	≧ 500	≧ 500		≧ 500	
Differential Mode Delay (DMD, @850nm)			Inner Range	Total Range	Inner Range	Total Range
(Radius X μm Y μm)	μm	-	5 - 18	0 - 23	5 - 18	0 - 23
DMD mask 1	ps/m	-	≦ 0.23	≦ 0.70	≦ 0.125	≦ 0.38
DMD mask 2	ps/m	-	≦ 0.24	≦ 0.60	≦ 0.131	≦ 0.33
DMD mask 3	ps/m	-	≦ 0.25	≦ 0.50	≦ 0.136	≦ 0.27
DMD mask 4	ps/m	-	≦ 0.26	≦ 0.40	≦ 0.142	≦ 0.22
DMD mask 5	ps/m	-	≦ 0.27	≦ 0.35	≦ 0.147	≦ 0.19
DMD mask 6	ps/m	-	≦ 0.33	≦ 0.33	≦ 0.180	≦ 0.18
Backscatter Parameters of Fiber						
Attenuation Directional Uniformity	dB/km	≦ 0.05				
Attenuation Uniformity	dB	≦ 0.05				
Group Index of Refraction						
850nm		1.481				
1300nm		1.476				
Geometrical Parameters of Fiber						
Numerical Aperture	-	0.200±0.015				
Core Diameter	μm	50.0±2.5				
Core Non-circularity	%	≦ 6				
Core / Cladding Concentricity Error	μm	≦ 3.0				
Cladding Diameter	μm	115±3				
Cladding Non-circularity	%	≦ 2.0				
P-Coating Diameter	μm	125±2				
P-Coating Non-circularity	%	≦ 2.0				
P-Coating Concentricity Error	μm	≦ 3.0				
Coating Diameter	μm	245±10				
Coating Non-circularity	%	≦ 6				
Coating Concentricity	μm	≦ 12.5				
Fiber Curl	m	≧ 2				

Mechanical Characteristics

Specification		
Product Code		SCP500
	Unit	
Proof Test	Kpsi	100
Fatigue Resistance Parameter @23℃, 41%RH	nd	> 30
Bend Induced Attenuation		
2 turns around a mandrel of 15mm radius @850nm	dB	≦ 0.2
2 turns around a mandrel of 7.5mm radius @850nm	dB	≦ 0.5
Coating Strip Force (Typical)	g	< 100
Fiber Length (Typical)	km	1.1~8.8

Environmental Characteristices

	Unit	
Temperature Cycling Test @850nm and 1300nm -60℃ to +85℃	dB/km	≦ 0.5
Damp Heat Dependence Test @850nm and 1300nm +85℃, 85%RH for 30days	dB/km	≦ 0.5
Dry Heat Dependence Test @850nm and 1300nm +85℃, 30days	dB/km	≦ 0.5
Water soak Dependence Test @850nm and 1300nm +23℃ for 30days	dB/km	≦ 0.5

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