

# Technical Specification of Optical Fiber

## SINGLE MODE FIBER (G.652.d)

### 1. Optical Specifications

Specifications	Tolerance	Unit	Specified Value	
			1310 nm	1550 nm
Attenuation	Max.	dB/km	†0.35	†0.21
Mode Field Diameter	±0.5	µm	9.2	10.3
Chromatic Dispersion	Max.	ps/(nm*km)	†3.5	†17
Cladding Diameter	±2	µm	125	-
Core / Cladding Concentricity Error	-	µm	1	-
Zero Dispersion Wavelength	-	Attenuation	1300-1324	-
Cladding Non Circularity	Max.	%	†2	-
Coating Diameter	±15	µm	250	-
Cut off Wavelength	Max.	µm	1150-1270	-

### 2. Mechanical Specifications

Specifications	Unit	Specified Value
Proof Test	N	8.4
Proof Test Strain	%	1.00
Storage Temperature	°C	-40†K†80
Installation Temperature	°C	0†K†50

Note: 1310 nm; 1285 † λ † 1330 nm  
1550 nm; 1525 † λ † 1575 nm

## MULTI MODE FIBERS (62.5/125 - 50/125)

### 1. Optical Specifications

Specifications	Unit	Specified Value (62.5/125)		Specified Value (50/125)	
		850 nm	1300 nm	850 nm	1300 nm
Attenuation Max.	dB/km	3.0	0.7	2.5	0.7
Bandwidth Min.	MHz. km	160	300	500	500

### 2. Mechanical Specifications

Specifications	Unit	Specified Value (62.5/125)	Specified Value (50/125)
Core Diameter	µm	62.5±3	50±2.5
Cladding Diameter	µm	125±2	125±2
Coating Diameter	µm	245±10	245±10
Core Non Circularity (Max)	%	6	6
Core to Cladding Concentricity	µm	1.5	1.5
Cladding Non Circularity (Max)	%	2	2



# COPPER CORE TELECOMMUNICATION CABLES

