

Optical Characteristics for G 652D Fibers

Attenuation :	Before	After	Dispersion		
(dB/Km) @1310 nm :	≤ 0.360	: ≤ 0.380	1285 - 1330 nm		: ≤ 3.5 ps/nm.km
@1550 nm :	≤ 0.230	: ≤ 0.250	1270 - 1340 nm		: ≤ 5.3 ps/nm.km
@1285 - 1330 nm :	≤ 0.360+0.02	: ≤ 0.380 + 0.02	1550 nm		: ≤ 18 ps/nm.km
@1383 ± 3 nm :	≤ 0.360	: ≤ 0.380	Zero Dispersion wavelength		: 1300-1324 nm
Fiber cut-off wavelength	: ≤ 1320 nm		Zero Dispersion Slope		: ≤ 0.092ps/nm ² .km
Cable cut-off wavelength	: ≤ 1260 nm		PMD Co-efficient(1310nm & 1550nm)		
Mode Field Diameter @1310 nm	: 8.8 - 9.8 μm		At Fiber		: ≤ 0.2 ps/sqrt.km
Mode Field Diameter @1550 nm	: 10.4 ± 0.5 μm		At Cable Fiber		: ≤ 0.3 ps/sqrt.km

Fiber Geometry

Coating Diameter	: 245 ± 10 μm	Cladding Non-Circularity	: ≤ 1 %
Cladding Diameter	: 125 ± 1.0 μm	Mode Field Concentricity error	: ≤ 0.8 μm
Fiber Curl	: ≥ 4m radius Curv.		

Cable Mechanical & Environment Characteristics

Properties	IEC Standards	Specified Values
Tensile Strength test	[IEC 60794-1-2-E1]	9.8*2.5*W or 2670 N
Compressive Stress test	[IEC 60794-1-2-E3]	4000 Newton /100mm * 100mm for 600 seconds
Cable bend test	[IEC 60794-1-2-E11]	20D (D is the overall diameter of cable)
Impact test	[IEC 60794-1-2-E4]	50 Newton from a height of 0.5 meter, 10 impacts
Torsion test	[IEC 60794-1-2-E7]	10 Cycle (±180°), Weight=400 N, Length=2 Meter
Kink Resistance	[IEC 60794-1-2-E10]	20D (D is the overall diameter of cable)
Repeated Bending test	[IEC 60794-1-21-E6]	50 cycle, 5 Kg Load
Temperature Cycling test	[IEC 60794-1-2-F1]	-20° C to +70° C, 12 hours at each temperature
Water Penetration Test	[IEC 60794-1-2-F5]	2m water head, 3m sample, 24 hours.

Physical Characteristics

Cable Outer Diameter	: 16.0 ± 1.0 mm
Cable Weight	: 245 ± 25 Kg/Km
Cable Length Per Drum	: 3.0 Km ± 10 % or as per requirement

Ordering Information

S. No.	Item Description	Part Code
1	48F Multi-tube SM Double Sheath Armoured O.F. Cable	AM-AG-FSMMTRD-48F-ARM