

### SINGLEMODE OPTICAL FIBRE SMF – G657



Low macrobending sensitive fibre (G.657) provides high resistance to additional losses due to macrobending. Ideal for cable mounting inside buildings, patchcords and/or interconnection cables. It offers significant added value in Fibre-to-the-Home access networks.

The fibre fully comply with or exceeds the IEC 60793-2-50, ITU G.652.D, G657A1, G.657A2, G.657B2, G657B3, Telcordia GR-20-CORE, ANSI/IECA S-87-640.

GEOMETRICAL AND MECHANICAL CHARACTERISTICS	G.657.A1	G.657.A2 / B2	G.657.B3
Cladding Diameter	125 ± 0.7 µm		125 ± 0.4 µm
Core / Cladding Concentricity	≤ 0.5 µm		≤ 0.3 µm
Cladding Non-Circularity	≤ 0.7 %		≤ 0.3 %
Primary Coating Diameter	242 ± 0.7 µm		242 ± 0.5 µm
Coating / Cladding Concentricity	≤ 12 µm	≤ 10 µm	≤ 12 µm
Coating Non-Circularity	≤ 5 %		
Proof Test	≥ 8.8 N / ≥ 1 % / ≥ 100 Kpsi		≥ 200 Kpsi

OPTICAL CHARACTERISTICS		G.657.A1	G.657.A2 / B2	G.657.B3
Attenuation with Bending (1550 nm)	1 turn / Mandrel 10mm	≤ 0.75	≤ 0.10	≤ 0.03
	10 turns / Mandrel 15mm	≤ 0.25	≤ 0.03	
	1 turn / Mandrel 7.5mm			≤ 0.08
	1 turn / Mandrel 5mm			≤ 0.15
Mode Field Diameter (µm)	1310 nm	9.0 ± 0.4	8.5 – 9.3	8.8 ± 0.4
	1550 nm	10.1 ± 0.5	9.4 – 10.4	9.8 ± 0.5
Attenuation Coefficient (dB/Km)	1310 nm	≤ 0.35	≤ 0.35	≤ 0.35
	1383 nm	≤ 0.35	≤ 0.35	≤ 0.35
	1460 nm	≤ 0.25	≤ 0.25	
	1550 nm	≤ 0.21	≤ 0.21	≤ 0.22
	1625 nm	≤ 0.23	≤ 0.23	≤ 0.24
Chromatic Dispersion Coefficient (ps/nm.Km)	1285 – 1330 nm	≤  3		
	1550 nm	≤ 18		
	1625 nm	≤ 22		
Zero Dispersion Wavelength (nm)	1300 – 1322	1300 – 1324	1300 – 1324	
Zero Dispersion Slope (ps / nm <sup>2</sup> Km)	≤ 0.090	≤ 0.092	≤ 0.092	
Cable Cut-off Wavelength (nm)	≤ 1260			
PMD (ps / (ps/√Km))	1550 nm	≤ 0.1		

Characteristics according to ITU-T G652.D, G657A, G657B, IEC 60793-2-50, Telcordia GR-20-CORE, ANSI/IECA S-87-640.

**Important notice.**- At present, G657 fibres are not recognized by some splicing machines. Check your machine before use or ask your local distributor.