

Optical Fibre

Singlemode Fibre G.657A1 (108)

Datasheet: GD63103v4

Brand-Rex | a **LEVITON** company

SPECIFICATION FOR ENHANCED LOW MACROBENDING SENSITIVE, LOW WATER PEAK SINGLEMODE OPTICAL FIBRE ITU-T RECOMMENDATION G.657A1*, G.652D

OPTICAL PROPERTIES

Fibre selected to meet cabled attenuation of	@ 1310 nm @ 1550 nm	≤ 0.38 dB/km ≤ 0.25 dB/km
Attenuation Uniformity	Point or step defect Extended variations	≤ 0.1 dB ≤ 0.1 dB
Mode Field Diameter	@ 1310nm	9.0 ± 0.4 μ m
Cut-Off Wavelength	λ_{ccf}	≤ 1260 nm
Zero Dispersion Wavelength		1300 - 1322 nm
Slope at Zero Dispersion Wavelength		≤ 0.090 ps/nm ² .km
Polarisation Mode Dispersion		
Uncabled fibre – Individual		≤ 0.1 ps/ $\sqrt{\text{km}}$
Link Design Value PMDq		≤ 0.2 ps/ $\sqrt{\text{km}}$
Effective Group Index	@1310/1550 nm	1.467/1.468

MACROBENDING PROPERTIES

10 turns around 30mm diameter	@1550 nm	≤ 0.25 dB/km
10 turns around 30mm diameter	@1625 nm	≤ 1.0 dB/km
1 turn around 20mm diameter	@1550 nm	≤ 0.75 dB/km
1 turn around 20mm diameter	@1625 nm	≤ 1.5 dB/km

GEOMETRICAL PROPERTIES

Cladding Diameter		125 ± 0.7 μ m
Glass Concentricity Error		≤ 0.5 μ m
Cladding Non-Circularity		≤ 0.7 %
Coating Diameter		242 ± 7 μ m
Coating Concentricity Error		≤ 12.0 μ m
Coating Non-Circularity		≤ 5 %

MECHANICAL PROPERTIES

Proof Test Level		≥ 0.69 GPa / ≥ 1.0 %
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- *ITU-T Recommendation G.657A1 replaces ITU-T Recommendation G.657A and is compatible with G.652D