

Optical Fibre

Singlemode Fibre G652.D (008)

Datasheet GD55683v10

Brand-Rex | a **LEVITON** company

SPECIFICATION FOR LOW WATER PEAK SINGLEMODE OPTICAL FIBRE ITU-T RECOMMENDATION G.652.D, and IEC 60793-2-50 Type B1.3, used in OS1/OS2 cables

OPTICAL PROPERTIES

| | | |
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| Fibre selected to meet cabled attenuation of | @ 1310 nm @ 1383 nm @ 1550 nm | ≤ 0.38 dB/km ≤ 0.38 dB/km ≤ 0.25 dB/km |
| Attenuation Uniformity | Point or step defect | ≤ 0.1 dB |
| | Extended variations | ≤ 0.1 dB |
| Mode Field Diameter | @ 1310nm | 9.2 ± 0.4 μm |
| Cut-Off Wavelength | λ _c (fibre) | 1190 - 1320 nm |
| | λ _{cc} (cable) | ≤ 1260 nm |
| Chromatic Dispersion | 1285 – 1330 nm | ≤ 3 ps/nm.km |
| | 1550 nm | ≤ 18.0 ps/nm.km |
| Zero Dispersion Wavelength | | 1302 - 1322 nm |
| Slope at Zero Dispersion Wavelength | | ≤ 0.090 ps/nm ² .km |
| Polarisation Mode Dispersion | | |
| Uncabled fibre – Individual | | ≤ 0.1 ps/√km |
| Link Design Value PMDq | | ≤ 0.2 ps/√km |
| Nominal Refractive Index | 1310/1550 nm | 1.470 |

MACROBENDING PROPERTIES

| | | |
|--------------------------------|----------|--------------|
| 100 turns around 60mm diameter | @1625 nm | ≤ 0.05 dB/km |
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GEOMETRICAL PROPERTIES

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|-----------------------------|----------|--------------|
| Cladding Diameter | | 125 ± 0.7 μm |
| Glass Concentricity Error | | ≤ 0.5 μm |
| Non-Circularity | Core | ≤ 6 % |
| | Cladding | ≤ 0.7 % |
| Coating Diameter* | | 242 ± 7 μm |
| Coating Concentricity Error | | ≤ 12.0 μm |
| Coating Non-Circularity | | ≤ 5 % |

MECHANICAL PROPERTIES

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| Proof Test Level | | ≥ 0.69 GPa / ≥ 1.0 % |
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- * Optical fibre coating designed for long life time and low microbending sensitivity