

# Optical Fibre

## OM4 (50/125µm Multimode fibre)

Datasheet GD57198v8

**Brand-Rex** | a **LEVITON**  
company

### 850 nm LASER-OPTIMIZED 50/125 MULTIMODE OPTICAL FIBRE IEC 60793-2-10 Type A1a.3 and ISO/IEC 11801 (OM4 cabled optical fibre) For 10 Gb/s APPLICATION UP TO 550 m

#### OPTICAL PROPERTIES

|  |  |   |
|--|--|---|
| Attenuation  | @ 850 nm<br>@ 1300 nm                        | ≤ 2.8 dB/km<br>≤ 0.8 dB/km  |
| Overfilled Modal Bandwidth   | @ 850 nm<br>@ 1300 nm                        | ≥ 3500 MHz.km<br>≥ 500 MHz.km   |
| Effective Modal Bandwidth  | @ 850 nm                                     | ≥ 4700 MHz.km   |
| Numerical Aperture   |  | 0.200 ± 0.015   |
| Chromatic Dispersion:<br>Zero-Dispersion Wavelength<br>Zero-Dispersion Slope | 1295 - 1300 nm<br>1300 - 1320 nm             | ≤ 0.001(λ <sub>0</sub> -1190) ps/nm <sup>2</sup> .km<br>≤ 0.11 ps/nm <sup>2</sup> .km |
| Attenuation Uniformity   | Point or Step Defects<br>Extended variations | ≤ 0.2 dB<br>≤ 0.2 dB  |
| Group Index of Refraction  | (Typical) 850 nm<br>1300 nm                  | 1.482<br>1.477  |

#### MACROBENDING PROPERTIES

|                              |          |            |
|------------------------------|----------|------------|
| 2 turns around 30mm diameter | @850 nm  | ≤0.1 dB/km |
| 2 turns around 30mm diameter | @1300 nm | ≤0.3 dB/km |
| 2 turn around 15mm diameter  | @850 nm  | ≤0.2 dB/km |
| 2 turn around 15mm diameter  | @1300 nm | ≤0.5 dB/km |

#### GEOMETRICAL PROPERTIES

|                                     |  |                |
|-------------------------------------|--|----------------|
| Core                                |  | 50 ± 2 µm      |
| Core Non-Circularity                |  | ≤ 5.0 %        |
| Core / Cladding Concentricity Error |  | ≤ 1 µm         |
| Cladding Diameter                   |  | 125.0 ± 1.0 µm |
| Cladding Non-Circularity            |  | ≤ 0.7 %        |
| Coating Diameter                    |  | 245 ± 10 µm    |
| Coating Concentricity Error         |  | ≤ 12.5 µm      |
| Coating Non-Circularity             |  | ≤ 6 %          |

#### MECHANICAL PROPERTIES

|                  |  |                      |
|------------------|--|----------------------|
| Proof Test Level |  | ≥ 0.69 GPa / ≥ 1.0 % |
|------------------|--|----------------------|

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