

# Fibre Optic

## Singlemode Optical Fibre SMF – G652

### Applications

Step index singlemode optical fibres. G652 fibres provide optimum performance in the 1310 nm wavelength. They can be used on metropolitan and access networks, CATV and premises applications in telecom.

These fibres comply with or exceed the ITU-T Recommendation G.652.D, the IEC International Standard 60793-2-50 type B.1.3 Optical Fiber Specification, ISO/IEC 11801 OS1, ISO/IEC 24702 OS2, Telcordia GR-20-CORE, ANSI/ICEA S-87-640 and RUS 7CFR 1755.900.

### Optical Characteristics

		G.652.D
Mode Field Diameter ( $\mu\text{m}$ )	1310 nm	$(8.9 - 9.2) \pm 0.4$
	1550 nm	$(9.9 - 10.4) \pm 0.5$
Attenuation Coefficient (dB/Km)	1310 nm	$\leq 0.35$
	1383 nm	$\leq 0.35$
	1460 nm	$\leq 0.25$
	1550 nm	$\leq 0.21$
	1625 nm	$\leq 0.23$
Chromatic Dispersion Coefficient (ps/nm.Km)	1285 – 1330 nm	$\leq  3 $
	1550 nm	$\leq 18$
	1625 nm	$< 22$
Zero Dispersion Wavelength (nm)		1300 - 1322
Zero Dispersion Slope (ps / nm <sup>2</sup> Km)	850 nm	$\leq 0.090$
Group Index of Refraction	1310 nm	1.467
	1550 nm	1.468
Cable Cut-Off Wavelength (nm)		$\leq 1260$
PMD (ps/ $\sqrt{\text{Km}}$ )		$< 0.1$



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### Geometrical And Mechanical Characteristics

Cladding Diameter	125 ± 0.7 µm
Core / Cladding Concentricity	≤ 0.5 µm
Cladding Non-Circularity	≤ 0.7 %
Primary Coating Diameter	242 ± 7 µm
Coating Non-Circularity	≤ 5 %
Coating / Cladding Concentricity	≤ 12 µm
Proof Test	≥ 8.8 N / ≥ 1 % / ≥ 100 Kpsi