

Performance For Optical Fiber

Dimension

Type	Mode field diameter (μm)	Core efficiency area (μm^2)	Cladding diameter (μm)	Core/cladding concentricity error (μm)	cladding non-circularity (%)	Coating thickness (μm)	Min.sieving tension (N)
G.652	9.2±0.4 (1310nm)	-	125±1.0	≤0.5	≤1.0	245±5	≥8.6 (1% optical strain @100kpsi, hold time ≥1S)
G.655	9.2--10.0 (1550nm)	7.2 (1550nm)					

REMARK: G.652 -- SINGLE-MODE OPTICAL FIBER

G.655 -- Non-Zero Dispersion Displacement Single Mode Optical Fiber

Optical & Transmission Characteristics

Item	Attenuation		
	G.652		G.655
	1310nm	1550nm	1550nm
Class A (dB/km)	≤0.36	≤0.22	≤0.22
Class B (dB/km)	≤0.40	≤0.25	≤0.25

Attenuation Uniformity

G.652: $\leq(\alpha \text{ mean} + 0.10\text{dB})/2$ G.655: $\leq\alpha \text{ mean} + 0.10\text{dB}$

Attenuation Increase with Bending

Item	G.652		G.655
	1310nm	1550nm	1550nm
100 turns of fiber loosely wound with 50mm diameter Increased attenuation(dB)	≤0.05	≤0.10	≤0.10

Dispersion

G.652	G.655
Zero dispersion wavelength: 1300~1322nm	Dispersion(1530~1565nm):
Zero dispersion slope(S_0): $\leq 0.092\text{ps}/\text{nm}^2 \cdot \text{km}$	$2.0\text{ps}/\text{nm} \cdot \text{km} \leq D(\lambda) \leq 6.0\text{ps}/\text{nm} \cdot \text{km}$
Dispersion modulus: $\leq 3.5\text{ps}/\text{nm} \cdot \text{km}$ (1285~1330nm)	Dispersion(1565~1625nm)
$\leq 18.0\text{ps}/\text{nm} \cdot \text{km}$ (1550nm)	$4.5\text{ps}/\text{nm} \cdot \text{km} \leq D(\lambda) \leq 11.2\text{ps}/\text{nm} \cdot \text{km}$

Cut-off Wavelength After Rewinding

G.652	G.655
$\lambda_{\text{cc}} \leq 1260\text{nm}$ (measured on a 20+2m length sample)	$\lambda_{\text{cc}} \leq 1470\text{nm}$