



WAVEOPTICS

G.657.A1

Optical Fiber Specifications

**TECHNICAL
INFORMATION**



WAVEOPTICS FIBER (T) **G.657.A1**

Optical fiber specifications before cabling

CHARACTERISTICS		WAVEOPTICS G.657.A1
Fiber Code		T
Attenuation	1310 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.21 dB/km
	1625 nm	≤ 0.23 dB/km
Attenuation vs Wavelength Max. difference of α	1285-1330 nm	≤ 0.05 dB/km
	1525-1575 nm	≤ 0.05 dB/km
Mode field diameter	1310 nm	8.6 - 9.4 μ m
	1550 nm	9.6 - 10.6 μ m
Group refractive index	1310 nm	1.466
	1550 nm	1.467
Max. PMD per fiber		≤ 0.15 ps/ \sqrt km
Point discontinuities	1310 nm	≤ 0.05 dB/km
	1550 nm	≤ 0.05 dB/km
Cutoff wavelength		≤ 1260 nm





Physical Characteristics

CHARACTERISTICS	WAVEOPTICS G.657.A1
Cladding diameter	$125.0 \pm 0.7 \text{ um}$
Core-cladding concentricity error	$\leq 0.5 \text{ um}$
Cladding non-circularity	$\leq 1.0 \%$
Coating diameter	$245.0 \pm 7 \text{ um}$
Coating-cladding concentricity error	$\leq 12 \text{ um}$

Environmental Characteristics

CHARACTERISTICS	CONDITIONS	WAVEOPTICS G.657.A1
Temperature cycling	-60°C to $+85^{\circ}\text{C}$	$\leq 0.05 \text{ dB/km}$
Temperature & humidity cycling	-10°C to $+85^{\circ}\text{C}$ at 95% RH	$\leq 0.05 \text{ dB/km}$
Water immersion	$23^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\leq 0.05 \text{ dB/km}$
High temperature aging	$85^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\leq 0.05 \text{ dB/km}$

