



WAVEOPTICS

# G.657.A2

Optical Fiber Specifications

**TECHNICAL  
INFORMATION**



## WAVEOPTICS FIBER (E) **G.657.A2**

Optical fiber specifications before cabling

CHARACTERISTICS		WAVEOPTICS G.657.A2
Fiber Code		E
Attenuation	1310 nm	$\leq 0.35$ dB/km
	1383 nm	$\leq 0.35$ dB/km
	1490 nm	$\leq 0.25$ dB/km
	1550 nm	$\leq 0.21$ dB/km
	1625 nm	$\leq 0.23$ dB/km
Attenuation vs Wavelength Max. difference of $\alpha$	1285-1330 nm	$\leq 0.05$ dB/km
	1525-1575 nm	$\leq 0.05$ dB/km
Mode field diameter	1310 nm	8.2 - 9.0 $\mu$ m
	1550 nm	9.15 - 10.15 $\mu$ m
Group refractive index	1310 nm	1.466
	1550 nm	1.467
PMD link design value		$\leq 0.1$ ps/ $\sqrt$ km
Max. PMD per fiber		$\leq 0.15$ ps/ $\sqrt$ km
Point discontinuities	1310 nm	$\leq 0.05$ dB/km
	1550 nm	$\leq 0.05$ dB/km
Cutoff wavelength		$\leq 1260$ nm





## Physical Characteristics

CHARACTERISTICS	WAVEOPTICS G.657.A2
Cladding diameter	125.0 ± 0.7 μm
Core-cladding concentricity error	≤ 0.5 μm
Cladding non-circularity	≤ 1.0 %
Coating diameter	245.0 ± 7 μm
Coating-cladding concentricity error	≤ 12 μm

## Environmental Characteristics

CHARACTERISTICS	CONDITIONS	WAVEOPTICS G.657.A2
Temperature cycling	-60°C to +85°C	≤ 0.05 dB/km
Temperature & humidity cycling	-10°C to +85°C at 95% RH	≤ 0.05 dB/km
Water immersion	23°C ± 2°C	≤ 0.05 dB/km
High temperature aging	85°C ± 2°C	≤ 0.05 dB/km

